SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: ALEXIT-FST Strukturlack 404-12/topcoat
Use of the Substance/Mixture: Industrial serial painting
Company: Mankiewicz Coatings L.L.C
415 Jessen Lane
Charleston, South Carolina 29492
USA
Telephone: +1 (843) 6547755
Emergency Telephone: CHEMTREC +1 (800) 4249300 or +1 (703) 5273887

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Warning
Form: liquid, Color: according product name, Odor: characteristic
Hazard Summary: The information required is contained in this Material Safety Data Sheet.
OSHA Hazards: FLAMMABLE LIQUID
CARCINOGEN
TOXIC BY INHALATION.
HARMFUL BY SKIN ABSORPTION.
MODERATE SKIN IRRITANT

Potential Health Effects

Inhalation: Harmful if inhaled.
Causes headache, drowsiness or other effects to the central nervous system.
Harmful if inhaled.

Skin: May be harmful if absorbed through skin.
May cause skin irritation.
Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering.
May be harmful if absorbed through skin.
May cause skin irritation.

Eyes: No information regarding eye irritation.
No information regarding eye irritation.

Ingestion: May cause vomiting.

Chronic Exposure: Suspect cancer hazard - contains material which may cause
Suspect cancer hazard - contains material which may cause cancer.

Symptoms of Overexposure : No information available.

Carcinogenicity:

IARC
Group 2B: Possibly carcinogenic to humans

ethylbenzene 100-41-4

OSHA
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH
Confirmed animal carcinogen with unknown relevance to humans:
The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.
ethylbenzene 100-41-4

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture of synthetic resins, organic solvents and pigments

Hazardous ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>1330-20-7</td>
<td>10.00 - 30.00</td>
</tr>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>108-65-6</td>
<td>10.00 - 30.00</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>5.00 - 10.00</td>
</tr>
<tr>
<td>n-butyl acetate</td>
<td>123-86-4</td>
<td>5.00 - 10.00</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

First aid procedures

General advice : In all cases of doubt, or when sickness symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation : Remove to fresh air, keep patient warm and at rest. Irregular breathing/no breathing: artificial respiration. If unconscious place in recovery position and seek medical attention.
advice.

Skin contact : Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners!

Eye contact : Remove contact lenses, irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.

Ingestion : Do NOT induce vomiting. If accidentally swallowed obtain immediate medical attention. Never give anything by mouth to an unconscious person. Keep at rest.

Notes to physician

Symptoms : No information available.

Treatment : No information available.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point : 82 °F (28 °C) Method: ISO 2719

Ignition temperature : > 752 °F (> 400 °C)

Lower explosion limit : 1 % (V)

Upper explosion limit : 10 % (V)

Fire fighting

Suitable extinguishing media : Alcohol resistant foam, CO2, powders, water spray

Unsuitable extinguishing media : High volume water jet

Further information : Cool endangered containers with water in case of fire. DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO ENTER DRAINS OR WATER COURSES!!

Protective equipment and precautions for firefighters

Specific hazards during fire fighting : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Special protective equipment for fire-fighters : As in any fire, wear self-contained breathing apparatus pressure - demand, MSHA / NIOSH (approved or equivalent)
and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Exclude sources of ignition and ventilate the area. Do not inhale vapors. Refer to protective measures listed in sections 7 and 8.

Environmental precautions: Do not let product enter drains. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

Methods for containment / Methods for cleaning up: Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see chapter 13). Clean preferably with a detergent; avoid use of solvents.

SECTION 7. HANDLING AND STORAGE

Handling

Handling: Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentrations higher than the occupational exposure limits. Comply with the health and safety at work laws. Smoking, eating and drinking should be prohibited in the application area. Observe specific national regulations for handling and use of paints.

Advice on protection against fire and explosion: The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear anti-static footwear and clothing. No sparking tools should be used. Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air.

Storage

Requirements for storage areas and containers: Electrical equipment should be protected to the appropriate standard. Floors should be of the conducting type. Keep container tightly closed. Never use pressure to empty: container is not a pressure vessel. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Further information on storage conditions: Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and...
direct sunlight.  
Keep container dry in a cool, well-ventilated place.

Advice on common storage : Keep away from oxidizing agents and strongly acid or alkaline materials.

Storage temperature : 41 - 95 °F (5 - 35 °C)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Value</th>
<th>Control parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene CAS-No.1330-20-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH TWA</td>
<td>100 ppm</td>
<td></td>
</tr>
<tr>
<td>ACGIH STEL</td>
<td>150 ppm</td>
<td></td>
</tr>
<tr>
<td>OSHA P1 TWA</td>
<td>100 ppm 435 mg/m³</td>
<td></td>
</tr>
<tr>
<td>OSHA P0 TWA</td>
<td>100 ppm 435 mg/m³</td>
<td></td>
</tr>
<tr>
<td>OSHA P0 STEL</td>
<td>150 ppm 655 mg/m³</td>
<td></td>
</tr>
<tr>
<td>2-methoxy-1-methylethyl acetate CAS-No.108-65-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US WEEL TWA</td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td>ethylbenzene CAS-No.100-41-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH TWA</td>
<td>100 ppm</td>
<td></td>
</tr>
<tr>
<td>ACGIH STEL</td>
<td>125 ppm</td>
<td></td>
</tr>
<tr>
<td>OSHA P1 TWA</td>
<td>100 ppm 435 mg/m³</td>
<td></td>
</tr>
<tr>
<td>OSHA P0 TWA</td>
<td>100 ppm 435 mg/m³</td>
<td></td>
</tr>
<tr>
<td>OSHA P0 STEL</td>
<td>125 ppm 545 mg/m³</td>
<td></td>
</tr>
<tr>
<td>n-butyl acetate CAS-No.123-86-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH TWA</td>
<td>150 ppm</td>
<td></td>
</tr>
<tr>
<td>ACGIH STEL</td>
<td>200 ppm</td>
<td></td>
</tr>
<tr>
<td>OSHA P1 TWA</td>
<td>150 ppm 710 mg/m³</td>
<td></td>
</tr>
<tr>
<td>OSHA P0 TWA</td>
<td>150 ppm 710 mg/m³</td>
<td></td>
</tr>
<tr>
<td>OSHA P0 STEL</td>
<td>200 ppm 950 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Immediately Dangerous to Life or Health Concentrations (IDLH)

<table>
<thead>
<tr>
<th>Substance name</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>1330-20-7</td>
<td>Immediately Dangerous to Life or Health Concentration Value 900 parts per million</td>
<td>1995-03-01</td>
</tr>
</tbody>
</table>
Material Safety Data Sheet

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Product No.: 40412772B7000
Revision Date 04/17/2013
Print Date 04/17/2013
Version 1

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS No.</th>
<th>Hazard: Immediately Dangerous to Life or Health</th>
<th>Concentration Value</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td></td>
<td>800 parts per million</td>
<td>1995-03-01</td>
</tr>
<tr>
<td>n-butyl acetate</td>
<td>123-86-4</td>
<td></td>
<td>1700 parts per million</td>
<td>1995-03-01</td>
</tr>
</tbody>
</table>

**Engineering measures**

Engineering measures: Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain aerosol- and solvent vapors concentration below the OEL, suitable respiratory protection must be worn.

**Personal protective equipment**

Protective measures: Do not eat or drink during work - no smoking. Avoid product contact with skin, eyes and clothing. Avoid the inhalation of dust from sanding, particulates and spray mist arising from the application of this preparation. When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapor in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process until such time as the particulates and solvent vapor concentration has fallen below the exposure limits.

Eye protection: Use safety glasses or face shield (ANSI Z87.1 or approved equivalent).

Hand protection: Glove permeation data does not exist for this material. The following glove(s) should be used for splash protection only:

Appropriate material: nitrile

Skin and body protection: Personal should wear protective clothing as necessary to prevent skin contact. All parts of the body should be washed after contact.

Respiratory protection: If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. Use MSHA/NIOSH approved respirator if concentration exceeds recommended exposure levels. Dry grinding, torch cutting and/or welding however can produce hazardous dust and/or vapor. If possible, machine employing a wet medium. Where practicable, install exhaust hoods to improve capture of vapors and fumes and avoid exposition; otherwise wear respiratory protection equipment.
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form : liquid
Color : according product name
Odor : characteristic

Safety data
Flash point : 82 °F (28 °C)
   Method: ISO 2719
Ignition temperature : > 752 °F (> 400 °C)
Lower explosion limit : 1 %(V)
Upper explosion limit : 10 %(V)
Boiling point/boiling range : ca. 248 °F (120 °C)
Vapor pressure : ca. 100 hPa (75 mmHg)
   at 122 °F (50 °C)
Density : ca. 11.7 lb/gal (1.4 g/cm3)
   at 68 °F (20 °C)
Water solubility : Note: insoluble
Flow time : 67 s
   4 mm
   Method: DIN 53211

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid : Remarks: Stable under recommended storage and handling conditions (See section 7).

Materials to avoid : Remarks: Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Hazardous decomposition products : Note: When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous reactions : No dangerous reaction known under conditions of normal use. There are no data available on the preparation itself.

SECTION 11. TOXICOLOGICAL INFORMATION
Further information: Exposure of vapor concentration in excess of the stated OEL's may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

SECTION 12. ECOLOGICAL INFORMATION

Biodegradability: Remarks: There are no data available on the preparation itself.

Bioaccumulation: Remarks: There are no data available on the preparation itself.

Additional ecological information: There are no data available on the preparation itself.

The product should not be allowed to enter drains or water courses.

SECTION 13. DISPOSAL CONSIDERATIONS

Further information: Dispose of in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

DOT
UN number: 1263
Description of the goods: PAINT
Class: 3
Packing group: III
Labels: 3
Environmentally hazardous: no

IATA
UN number: 1263
Description of the goods: PAINT
Class: 3
Packing group: III
Labels: 3
Packing instruction (cargo aircraft): 366
Packing instruction (passenger aircraft): 355
Packing instruction (LO): Y344
Environmentally hazardous : no

IMDG
UN number : 1263
Description of the goods : PAINT
Class : 3
Packing group : III
Labels : 3
EmS Number 1 : F-E
EmS Number 2 : S-E

Marine pollutant : no
Environmentally hazardous : no

Other information : If transported within the user’s premises: To be transported always in closed, upright and safe containers. Make sure that persons handling these containers are aware of the rules of conduct in case of incident or spillage.

Receptacles with less than 30 litres capacity, are not subject to the regulations of IMDG chapters 4.1, 5.2 and 6.1 (see IMDG 2.3.2.5)

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Flammable Liquid, Carcinogen, Toxic by inhalation., Harmful by skin absorption., Moderate skin irritant

TSCA Status : y (positive listing)
All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard
Chronic Health Hazard

Clean Air Act Ozone-Depletion Potential : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Clean Water Act
This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO - KNOW
SARA 302 Reportable Quantity : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
Material Safety Data Sheet

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Product No.: 40412772B7000
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<table>
<thead>
<tr>
<th>SARA 313 Ingredients</th>
<th>Xylene 1330-20-7</th>
<th>ethylbenzene 100-41-4</th>
</tr>
</thead>
</table>

**US CAA HAP**

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):
- Xylene 1330-20-7 15.1657%
- Ethylbenzene 100-41-4 8.1005%

**CAA112(r)**

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

**CAA111**

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):
- Xylene 1330-20-7 15.1657%
- Ethylbenzene 100-41-4 8.1005%

**US State Regulations**

**Massachusetts Right To Know Ingredients**
- Xylene 1330-20-7
- Ethylbenzene 100-41-4
- Butyl acetate 123-86-4

**Pennsylvania Right To Know Ingredients**
- Xylene 1330-20-7
- Ethylbenzene 100-41-4
- Butyl acetate 123-86-4

**New Jersey Right To Know Ingredients**
- Xylene 1330-20-7
- Ethylbenzene 100-41-4
- Butyl acetate 123-86-4

**California Prop. 65 Ingredients**
- Warning! This product contains a chemical known in the State of California to cause cancer.
- Ethylbenzene 100-41-4

**SECTION 16. OTHER INFORMATION**

Further Information

**HMIS Classification**
- Health Hazard: 2
- Chronic Health Hazard: *
- Flammability: 3
- Physical hazards: 0
Material Safety Data Sheet

Product Name: ALEXIT-FST Strukturlack 404-12/topcoat
Product No.: 40412772B7000

Revision Date 04/17/2013
Print Date 04/17/2013

Version 1

NFPA Classification

Health Hazard: 2
Fire Hazard: 3
Reactivity Hazard: 0

Department issuing safety data sheet

UMCO Umwelt Consult GmbH
Georg-Wilhelm-Str. 183, D-21107 Hamburg
Telefon: +49 (0)40 / 79 02 36 300 Fax: +49 (0)40 / 79 02 36 357 e-mail: umco@umco.de

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.