1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Alseal 220i
Common Name: Dissolved metal complex/aluminum compound
SDS Number: A220
Revision Date: 5/28/2015
Version: 1

Supplier Details:
Coatings for Industry, Inc.
319 Township Line Road
Souderton, PA 18964

Emergency: Infotrac
Contact: USA: 1-800-535-5053 / International :352-323-3500
Phone: 215-723-0919
Fax: 215-723-0911
Email: cs@cficoatings.com
Web: www.cficoatings.com

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Health, Skin corrosion/irritation, 2
Health, Serious Eye Damage/Eye Irritation, 2 A

GHS Label elements, including precautionary statements

GHS Signal Word: **WARNING**

GHS Hazard Pictograms:

GHS Hazard Statements:

H315 - Causes skin irritation
H319 - Causes serious eye irritation

GHS Precautionary Statements:

P262 - Do not get in eyes, on skin, or on clothing.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
7732-18-5	45-55%	Water
******	2-5%	Metal Silicates
******	4-8%	Metal Silicates
7429-90-5	40-45%	Aluminum powder, uncoated
******	<2%	Non-hazardous solvent

4 FIRST AID MEASURES

Inhalation: Remove patient from exposure, keep warm and at rest. Obtain medical attention.

Skin Contact: Wash affected skin with plenty of water. If symptoms develop, obtain medical attention.

Eye Contact: Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.

Ingestion: If the product is allowed to dry and large amounts of dust are inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Most important symptoms and effects:
Alkaline.
Irritating to eyes and skin.

5 FIRE FIGHTING MEASURES

Flash Point: Greater than 200F

Autoignition Temp: N/A

Suitable extinguishing media:
Dry sand; Metal fire powders

Extinguishing media that must not be used for safety reasons:
Water; Carbon dioxide; Foam; Halones; ABC powder

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:
In case of contact with acidic or alkaline media, aluminium powder will react with hydrogen formation.

Special protective equipment for fire-fighters:
Use self-contained breathing apparatus. Wear protective clothing.

Other information:
Do not disperse and dissipate dust from dried coating – explosion hazard!

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear suitable protective clothing. Wear eye/face protection.

Environmental precautions
Do not allow to enter drains, sewers or watercourses. Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

Methods and materials for containment and cleaning up
Caution - spillages may be slippery. Contain spillages with sand, earth or any suitable adsorbent material. Transfer to a container for disposal or recovery.

Reference to other sections
See also Section 8

7 HANDLING AND STORAGE

Handling Precautions:
Precautions for safe handling:
Avoid contact with eyes, skin and clothing.
Avoid generation of mist or dust. Provide adequate ventilation.
Emergency shower and eye wash facilities should be readily available.
See Also Section 8.
Wear protective equipment to comply with good occupational hygiene practice.
Do not eat, drink or smoke at the work place.

Storage Requirements:
Conditions for safe storage, including any incompatibilities:
Keep at a temperature not exceeding (°C): 50 .
Do not allow material to freeze.
Provide an adequate bund wall.
Unsuitable containers: Aluminium and steel
See Also Section 10.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:
Exposure controls:
Wear protective equipment to comply with good occupational hygiene practice.
Do not eat, drink or smoke at the work place.

Appropriate engineering controls:
Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

Personal Protective Equipment:
Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use afull-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye/face protection: Chemical goggles (EN 166).

Skin protection: Wear suitable protective clothing and gloves. Plastic or rubber gloves. For example EN374-3, level 6 breakthrough time
(>480min). Wear suitable overalls.

Aluminum powder, uncoated (7429-90-5) [40-45%]

Components with workplace control parameters
7429-90-5 TWA 1 mg/m3 USA. ACGIH Threshold Limit Values (TLV)
Lower Respiratory Tract irritation Pneumoconiosis Neurotoxicity Not classifiable as a human carcinogen

TWA 15 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1 Limits for Air Contaminants

TWA 5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1 Limits for Air Contaminants

TWA 15 mg/m3 USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

TWA	5 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
TWA	5 mg/m3	USA. NIOSH Recommended Exposure Limits
TWA	10 mg/m3	USA. NIOSH Recommended Exposure Limits

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Gray
Physical State: Liquid
Spec Grav./Density: 1.55
Odor: Slight sweet odor
Solubility: Water soluble
Percent Volatile: 72%

10 STABILITY AND REACTIVITY

Reactivity: Possibility of hazardous reactions:
When arc welding vessels containing aqueous solutions of this material, take care to control any explosion risk from hydrogen evolved by electrolysis. This product will react with aluminium, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air. Can react violently if in contact with acids. Avoid strong acids or alkalis. Can react with sugar residues to form carbon monoxide.

Chemical Stability: Stable.
Conditions to Avoid: See "Reactivity"
Materials to Avoid: Avoid strong acids or alkalis
Hazardous Decomposition: In case of contact with strong acidic or alkaline materials, aluminum powder will react to form hydrogen.
Hazardous Polymerization: N/A

11 TOXICOLOGICAL INFORMATION

Aluminum powder, uncoated (7429-90-5) [40-45%]

Information on toxicological effects

Acute toxicity:
Oral LD50 LD50 Oral - rat - > 2,000 mg/kg
Inhalation LC50 LC50 Inhalation - rat - 4 h - > 888 mg/l
Dermal LD50 no data available
Other information on acute toxicity

Solvent, Trade Secret [<2%]

Information on toxicological effects

Acute toxicity:
Oral LD50 LD50 Oral - rat - 4,000 mg/kg
Inhalation LC50 no data available
Dermal LD50 LD50 Dermal - rat - > 2,000 mg/kg
Other information on acute toxicity

Acute toxicity

Ingestion: A large dose may have the following effects: headache, nausea,dizziness, convulsions, kidney damage.
Inhalation: Mist is irritant to the respiratory tract.

Skin Contact: Repeated and/or prolonged skin contact may cause slight irritation.
Eye Contact: Liquid or mist may cause discomfort and mild irritation.

Skin corrosion/irritation
Irritating to skin.

Serious eye damage/irritation
Irritating to eyes.

Sensitisation
Not sensitising.

Mutagenicity
No data.

Carcinogenicity
IARC, NTP, OSHA, ACGIH do not list this product or any components thereof as known or suspected carcinogen.

Reproductive toxicity
No data.

STOT - single exposure
Not classified.

STOT - repeated exposure
Not classified.

Aspiration hazard
Not classified.

12 ECOLOGICAL INFORMATION

Solvent, trade secret [<2%]

Information on ecological effects

Toxicity:
Toxicity to fish LC50 - other fish - 841 mg/l - 96 h.
Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 1,000 mg/l - 48 h.
and other aquatic invertebrates

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

13 DISPOSAL CONSIDERATIONS

Product: Allocation of waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging: Residuals must be removed from packaging and when emptied completely, disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

14 TRANSPORT INFORMATION

UN number: Not applicable.
Proper Shipping Name: Not applicable.
Transport hazard class(es): Not applicable.
Packing group: Not applicable.
Environmental hazards: Not classified as a Marine Pollutant.
Special precautions for user: No special packaging requirements.
Unsuitable containers: Aluminium
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
Not applicable.

15 REGULATORY INFORMATION

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

TSCA Inventory Status: Reported/Included.
AICS Inventory Status: Reported/Included.
DSL/NDSL Inventory Status: Reported/Included.
German Water Hazard Classification VwVwS: Product ID number 1314, WGK class 1 (low hazard to water).
SARA TITLE III: This product contains aluminum metal powder which is subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372.
Hazard Categories under SARA Title III §§311/312: Acute.
**** This product contains no known or suspect carcinogens.****

Chemical Safety Assessment

Not available.

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Regulatory CODE Descriptions
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TSCA = Toxic Substances Control Act
EPCRAWPC = EPCRA Water Priority Chemicals
MASS = MA Massachusetts Hazardous Substances List
NJHS = NJ Right-to-Know Hazardous Substances
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
SARA313 = SARA 313 Title III Toxic Chemicals
TXAIR = TX Air Contaminants with Health Effects Screening Level
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16 OTHER INFORMATION

NOTICE : This information is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof Coatings For Industry, Inc. assumes no responsibility for personal injury or property damage to vendees, users, or third parties caused by the material, such vendees or users assume all risks associated with the use of the material. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws.