Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Product/Chemical Name: ALPOLIC®/fr SCM
Manufacturer: Mitsubishi Plastics Composites America, Inc.
401 Volvo Parkway
Chesapeake, Virginia 23320
Emergencies: Chemtrec 1-800-424-9300
Other information call 1-757-382-5750 (Monday-Friday/ 9am-5pm)

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt
Stainless Steel	Not Available	20
Core Materials	Not Available	50-80
Fluoropolymer Coating	Not Available	<1

Stainless steel is an alloy that contains many metals including, but not limited to iron oxide, chromium 3, and nickel. Normal conditions of use of our product should not cause any airborne exposure to the stainless steel alloys.

Section 3 – Hazards Identification

Emergency Overview

Metal machining or grinding operations may produce fine particulate or dust. Melting, welding, or brazing may produce metal fumes and particulates. Inhalation of excessive fume or dust concentrations may result in respiratory tract irritation and/or metal fume fever.

Potential Health Effects

Primary Entry Routes: Inhalation
Inhalation: Slight irritation of the respiratory tract.
Eye: Dust may cause irritation by mechanical abrasion.
Skin: Slight irritation possible to sensitive individuals.
Carcinogenicity: See Section 11 for detailed information.

HMIS
H 1
F 0
R 0
PPE
Sec.8

Section 4 – First Aid Measure

Inhalation: Protect yourself with appropriate PPE, remove the person to fresh air. Decontaminate and begin rescue breathing if breathing has stopped and CPR if heart action has stopped. Seek prompt medical attention.

Eye Contact: DO NOT allow victim to rub or keep eyes tightly shut. Gently lift eyelids and immediately flush eyes with large amounts of water. Continue to flush for at least 30 minutes, occasionally lifting the upper and lower lids. Seek prompt medical attention.

Skin Contact: Quickly remove contaminated clothing. Immediately wash area with large amounts of water. Seek prompt medical attention for any reddened skin other than from washing.

Ingestion: Never give anything by mouth to an unconscious or convulsing person. Contact a Poison Control Center (PCC). Unless the PCC advises otherwise, have the conscious and alert person drink 1 to 2 glasses of water to dilute. Induce Vomiting only after recent ingestions due to the possibility of seizures. Seek prompt medical attention.

Section 5 – Fire-Fighting Measures

Flash Point: NA
Flash Point Method: NA
Burning Rate: NA
Auto Ignition Temperature: NA
Flammability Classification: 0 Not Flammable (HMIS, NFPA)
Extinguishing Media: Water spray, dry chemical foam, carbon dioxide
Unusual Fire or Explosion Hazards: None
Hazardous Combustion Products: Carbon Monoxide, carbon dioxide, nitrogen oxide, and smoke. Under certain conditions some aliphatic aldehydes and carboxylic acids may form.
Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

Section 6 – Accidental Release Measures

Spill/Leak Procedures: Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind and keep out of low areas. Stop the source of any leak if can be done safely.
Small Spills: Absorb any spilled material with sand, earth, or other non-combustible absorbent.
Large Spills: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.
Cleanup: Same as for small spills.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 – Handling and Storage

Handling Precautions: Avoid contact with sharp edges and corners.
Storage Requirements:
Regulatory Requirements:

Section 8 – Exposure Controls / Personal Protection

Engineering Controls:
Ventilation:
The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release

Respiratory Protection:
IMPROPER USE OF RESPIRATORS IS DANGEROUS. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134 and 1910.137) and, if necessary, wear a NIOSH approved respirator Select respirator based on its suitability to provide adequate worker protection for given work conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning and convenient, sanitary storage areas.

Protective Clothing/Equipment:
Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear splash-proof chemical goggles and face shield when working with liquid, unless full facepiece respiratory protection is worn. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations:
Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment:
Separate contaminated work clothes from street clothes. Launder before reuse. Remove material from your shoes and clean personal protective equipment. Never take home contaminated clothing.
Comments:
Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the restroom, or apply cosmetics.

Section 9 – Physical and Chemical Properties

Physical State: Solid
Appearance and Odor: Solid stainless steel, core material, various color
Odor Threshold: NA
Vapor Pressures: NA
Vapor Density (Air=1): NA
Formula Weight: NA
Density: NA
Specific Gravity (H_2O=1, at 4°C): NA
pH: NA
Water Solubility: NA

Other Solubilities: NA
Boiling Point: NA
Freezing/Melting Point: NA
Viscosity: NA
Refractive Index: NA
Surface Tension: NA
% Volatile: NA
Evaporation Rate: NA

Section 10 – Stability and Reactivity

Stability: Stable under conditions of normal use.
Polymerization: NA
Chemical Incompatibilities: NA
Conditions to Avoid: NA
Hazardous Decomposition Products: NA

Section 11 – Toxicological Information

Short term exposure to fumes/dust generated from stainless steel use and processing may produce irritation of the eyes and respiratory system. Inhalation of high concentrations of freshly formed oxide fumes of iron, manganese and cooper may cause metal fume fever, characterized by a metallic taste in the mouth, dryness and irritation of the throat and influenza-like symptoms.

Chronic inhalation of high concentrations of iron oxide fumes or dust may lead to a benign pneumoconiosis (siderosis). Inhalation of high concentrations of ferric oxide may possibly have a synergistic effect and increase the risk of lung cancer development in workers exposed to pulmonary carcinogens.

Chromium and nickel and their compounds are listed in NTP's 7th Annual Report on Carcinogens. Exposure to dust and fumes can cause sensitization dermatitis, inflammation and/or ulceration of upper respiratory tract, and cancer nasal passages and lungs.

NTP classifies nickel metal and certain nickel compounds as "reasonably anticipated to be carcinogens". IARC classifies nickel metal as a possible human carcinogen (Group 2B) and certain nickel compounds as known human carcinogens (Group 1).

NTP reports that there is inadequate evidence for the carcinogenicity of chromium metal and most trivalent chromium (CrIII) compounds in humans and experimental animals. However, NTP classifies certain hexavalent chromium compounds as "known to be carcinogens." Similarly, IARC indicates that chromium compounds and trivalent chromium compounds are not classifiable as human carcinogens (Group 3), but that certain hexavalent chromium compounds are known carcinogens (Group 1). Since the hexavalent form of chromium may be produced during welding, heat treating and alkaline descaling processes, and industrial hygiene evaluation of such processes should be conducted to determine if exposure to hexavalent chromium is present.

Finally, this product may contain trace amounts of other heavy metals including arsenic, cadmium, cobalt and lead, recognized by NTP, OSHA or IARC as carcinogens.

Section 12 – Ecological Information

Ecotoxicity: NA
Environmental Fate: NA
Environmental Degradation: NA
Soil Absorption/Mobility: NA

Section 13 – Disposal Considerations

Disposal: Contact your local supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state and local regulations.

Section 14 – Transport Information

DOT Transportation Data (49 CFR 172.101):

Not regulated per U.S. DOT, IATA, or IMO.

Section 15 – Regulatory Information

EPA Regulations: Superfund Amendments and Reauthorization Act (SARA) Title III: This product does not contain any substances reportable under Sections 302, 304, 313, (40 CFR 372). Sections 311 and 312 (40 CFR 370) apply (delayed hazard).

Toxic Substances Control Act (TSCA): All substances in this product are listed, as required, on the TSCA inventory.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Clean Air Act (CAA): This product contains fibers with an average diameter > 1 µm and thus is not considered a hazardous air pollutant.

OSHA Regulations: Comply with all applicable OSHA standards.

Section 16 – Other Information

Abbreviations:

ACGIH -	American Conference of Governmental Industrial Hygienist
OSHA -	Occupational Safety and Health Administration
TLV -	Threshold Limit Value
PEL -	Permissible Exposure Limit
TWA -	Time Weighted Average
STEL -	Short Term Exposure Limit
TSCA -	Toxic Substance Control Act
RCRA -	Resource Conservation Recovery Act
IDLH -	Immediately Dangerous to Life and Health

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