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HMS: H=3*, F=2, R=2, PPE=X
* = Chronic health effects may occur

MATERIAL SAFETY DATA SHEET
for
COATINGS, RESINS, and RELATED MATERIALS

SECTION I - PRODUCT IDENTIFICATION

Corporate Address:
47 PARK AVENUE
ELVERSON, PA 19520

Trade Name & Synonyms:
ALCHEMETAL

Emergency Telephone Number: 610-286-3500
24 Hours a Day

Formula:
D3577 ALCHEMETAL AC-300 COAT

P.C. Number: **D3577**

Date of Preparation: 27 October 2003

FAX: 610-286-3510

Supercedes: None

IMPORTANT: BEFORE USING ALCHEMETAL D3577 ALCHEMETAL AC-300 COAT,
HAVE ALL PROCESSING PERSONNEL READ THIS DOCUMENT!

SECTION II - HAZARDOUS INGREDIENTS AND OCCUPATIONAL EXPOSURE LIMITS

Chemical(s) with CAS RN and vapor pressure (if applicable)	OSHA PEL	ACGIH TLV	Manufacturer's Recommendation
GRAPHITE, SYNTHETIC 7782-42-5S	TWA = 5 mg/m ³	TWA = 2 mg/m ³	No recommendation
N-METHYLPYRROLIDONE (NMP) 872-50-4 0.3 mm Hg at 20 C	Not established	Not established	No recommendation
SOLVENT NAPHTHA HEAVY AROMATIC 64742-94-5 3.0 mm Hg at 25 C	Not established	Not established	No recommendation
NAPHTHALENE 91-20-3	TWA = 10 ppm, 50 mg/m ³ .	(skin) TWA = 10 ppm STEL = 15 ppm	No recommendation
TRIFUNCTIONAL METHACRYLATE EST TS246	Not established	Not established	No recommendation

SECTION III - PHYSICAL DATA

Appearance Viscous, metallic-effect, gray, liquid dispersion.
Boiling point (range) . . 176 TO 210 degrees C
Vapor density Heavier than air
Evaporation rate Slower than ether
Specific gravity (H2O = 1) 1.11
Percent volatile by volume 76.7 %
Volatile organics (VOC) 6.47 Lbs VOC/Gal less water

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Lower Explosive Limit (%): 1.00

Flash point (Method Used): 82 degrees C (Setaflash)

Extinguishing Media:

Use carbon dioxide (CO2), alcohol foam, dry chemical, or water spray/water fog extinguishing systems.

Special Fire Fighting Procedures:

Firemen and emergency responders: wear full turnout gear or Level A equipment including positive-pressure, self-contained breathing apparatus (SCBA). If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

Unusual Fire and Explosion Hazards:

The product vapor is heavier than air and may travel a considerable distance to a source of ignition and flashback.

SECTION V - HEALTH HAZARD DATA

Primary Route(s) of Entry and Exposure:

Inhalation: Yes Skin absorption: Yes Ingestion: Yes Skin or eye contact: Yes

Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA or ACGIH.

<u>Chemical</u>	<u>Reference</u>	<u>Category</u>
NAPHTHALENE	NTP	Anticipated human carcinogen
	IARC	Group 2B Possible human carcinogen
	OSHA	OSHA Carcinogen

Effects of Overexposure, GRAPHITE, SYNTHETIC:

Inhalation -	This material may cause irritation to the respiratory tract and shortness of breath. Medical conditions such as emphysema and asthma may be aggravated by overexposure.
Skin contact -	This material may cause skin irritation.
Skin absorption -	No data found.
Eye contact -	This material may be irritating to the eyes.
Ingestion -	This material may be irritating if ingested.
Systemic & other effects -	No data found.
Supplemental Health information -	No data found.

Effects of Overexposure, N-METHYLPYRROLIDONE (NMP):

Inhalation -	May cause irritation of the respiratory tract.
Skin contact -	NMP is a moderate skin irritant and may cause delayed skin irritation. Human experience has demonstrated redness, cracking and blistering of skin through repeated or prolonged contact.
Skin absorption -	No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin absorption exposure.
Eye contact -	Eye contact with NMP may cause moderate eye irritation including burning sensation, tearing, redness or swelling. May cause temporary corneal clouding.
Ingestion -	NMP may be a health hazard if ingested in large quantities. Symptoms include nausea, dizziness, and vomiting.
Systemic & other effects -	No relevant human data found.
Supplemental health information -	NMP was reported to effect pregnancy and/or fetal development in laboratory animals. Recently completed studies and an independent, expert review of previous studies confirm that NMP is not a mutagen, teratogen, carcinogen, or reproductive toxin.

Effects of Overexposure, SOLVENT NAPHTHA HEAVY AROMATIC:

Inhalation -	Excessive inhalation of vapors may cause nasal and respiratory irritation, CNS effects including dizziness, weakness, nausea, headache, and possible unconsciousness, and even asphyxiation.
Skin contact -	Prolonged or repeated contact may cause moderate irritation, defatting, and dermatitis.
Skin absorption -	No data found.
Eye contact -	May cause severe irritation, tearing, and blurred vision.
Ingestion -	May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Systemic & other effects -	Aspiration of material into the lungs, due to vomiting, may cause chemical pneumonitis, which can be fatal.
Supplemental information -	No data found.

Effects of Overexposure, NAPHTHALENE:

Inhalation -	Inhalation of vapors can cause headache, nausea, vomiting, extensive sweating and confusion. The predominant reaction is delayed intravascular hemolysis with symptoms of anemia, fever, jaundice and kidney or liver damage.
Skin contact -	May irritate the skin and, on prolonged contact, may cause rashes and allergy. Sensitized individuals may suffer severe dermatitis.
Skin absorption -	No data found.
Eye contact -	Vapors may cause irritation, redness and pain.
Ingestion -	Toxic. May cause headache, profuse sweating, listlessness, dark urine, nausea, vomiting and disorientation. Intravascular hemolysis may also occur with symptoms similar to those noted for inhalation. Severe overexposure may produce coma with or without convulsions.
Systemic & other effects -	Chronic exposure has led to cataract formation in the eyes. May cause skin allergy.
Supplemental health information -	Repeated and/or prolonged exposure may cause damage to the blood, kidneys, liver, reproductive system and central nervous system.

Effects of Overexposure, TRIFUNCTIONAL METHACRYLATE ESTER:

Inhalation -	Exposure may cause irritation of the respiratory tract. Symptoms may include sneezing, nasal ulceration, and burning sensation in the throat, nausea, headache and vomiting. Exposure may produce cough, mucous, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction.
Skin contact -	This material is expected to be a severe skin irritant. Irritation effects may be immediate or delayed, and dermatitis can result. This material may also cause skin burns on contact with wet or moist skin or upon prolonged contact with dry skin. May cause blistering. This material may cause an allergic skin reaction (sensitization) in susceptible individuals upon repeat exposure.
Skin absorption -	This material is expected to be a slight skin absorption hazard.
Eye contact -	Exposure may cause destruction of eye tissue or severe eye irritation. Symptoms may include severe pain or burning sensation, tearing, redness or swelling. May cause temporary visual disturbances such as double vision and sensitivity to light.
Ingestion -	Ingestion of this material may cause corrosion or irritation of the linings of the mouth, throat, and gastrointestinal tract. Symptoms may include abdominal pain, nausea and vomiting.
Systemic & other effects -	Trifunctional methacrylate has shown positive results in the mouse lymphoma assay. However, carcinogenicity studies have been negative. Many materials of this type are known to produce false positive findings in the mouse lymphoma test.
Supplemental Information -	High temperatures, inhibitor depletion, accidental impurities or exposure to oxidizers may cause spontaneous polymerizing reaction generating heat and explode during runaway polymerization. Do not store at or below 32 degrees F (0 degrees C). Use only non-sparking tools and limit storage time.

Emergency & First Aid Procedures:

Inhalation: If overcome by product vapors, mists or processing fumes, remove the person from exposure immediately; call a physician. If breathing is irregular or stopped, start resuscitation. Administer oxygen if a qualified person is available.

Skin contact: In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water.

Eye contact: In case of eye contact, flush the eyes with water for 15 minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. Have a physician examine the eyes.

Ingestion: If material is ingested, seek immediate medical attention. If vomiting occurs, keep the head below the hips to prevent aspiration of liquid into the lungs.

SECTION VI - REACTIVITY DATA

Stability:

- unstable

Incompatibility (Materials to Avoid):

- strong oxidizing agents, acids, and alkali/base/caustic solutions
- may ignite in the presence of heat and combustible materials
- metal compounds and surface active materials.

Hazardous Decomposition Products:

- oxides of carbon
- oxides of nitrogen

Hazardous Polymerization:

- may occur

SECTION VII - SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:

Spill Supervisor: Ensure cleanup personnel wear all appropriate Personal Protective Equipment, including respiratory protection. If this product has a numerical flashpoint, remove all ignition sources; if the flashpoint is none, this precaution is unnecessary. Keep nonessential personnel away from the contaminated area.

Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas.

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Ventilate the contaminated area. If this product has a numerical flashpoint, use nonsparking (bronze, aluminum, plastic, wood) tools to clean up the spill. If the flashpoint is none, use conventional steel tools (or those just described) to clean up the spill. EXCEPTIONS: If this product is Ultralon DCO Acid or a Xylar coating, (except Xylar 500), use plastic shovels/scoops/rubber squeegees to clean up the spill because of the products' acid content. Use the recommended tool type to mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne and solvent-borne coatings. Use an absorbent like sand, earth or clay for Ultralon DCO Acid and Xylar coatings (except Xylar 500). Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Label the waste container. Dispose of waste in compliance with all Federal, state, regional, and local regulations.

Waste Disposal Method:

As the US EPA, state, regional and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the waste generator, to learn of and satisfy all the requirements which affect you. Dispose of hazardous waste at a properly permitted disposal facility. Ensure conformity to all applicable waste disposal regulations.

The US EPA Hazardous Waste Numbers which follow are applicable to the unadulterated product if it enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies wastes which are subject to regulation under various sections of the Code and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA).

None

SECTION VIII - SAFE HANDLING & USE INFORMATION

Respiratory Protection:

Respiratory protection may not be needed if local exhaust is sufficient to maintain levels of hazardous ingredients below occupational exposure limits. If needed, use a NIOSH/MSHA approved respirator equipped with organic vapor cartridges and high-efficiency, particulate air (HEPA) filters.

Do not use respirators beyond their capabilities. For emergencies and unknown concentrations, use supplied-air respiratory protection or a positive-pressure, self-contained, breathing apparatus (SCBA).

Ventilation:

Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits. Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace.

Local Exhaust:

Local exhaust is recommended to ensure adequate ventilation.

Mechanical (General):

Use explosion-proof equipment and good manufacturing practice.

Special:

Safety showers and eyewash fountains should be readily available to personnel who handle this material. Enforce "No Smoking" rules. If this product has a numerical flashpoint, do not handle it in close proximity to unshielded light fixtures.

Protective Gloves:

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, pinholes, or signs of excessive wear.

Eye Protection:

Wear splash goggles. If extra protection is needed, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

Other Protective Equipment:

Wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

SECTION IX - SPECIAL PRECAUTIONS

Precautions to be Taken When Handling and Storing:

Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust.

Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 40 to 95 F (4 to 35 C).

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Other Precautions:

Good personal hygiene and good housekeeping are important. Wear fresh clothing daily. Contaminated clothes and shoes must not be worn home. Launder contaminated clothing before reuse. Remove contaminated shoes; clean and dry before reuse.

Do not smoke or eat in the work area. Thoroughly wash hands and face before eating. Take every precaution to avoid inhalation and ingestion of product residue.

Do not use compressed air to clean contaminated floors or equipment. Surfaces should be cleaned by vacuuming or wet scrubbing. Vacuum cleaners should be suitable for use in an industrial environment (explosion proof, if necessary) and equipped with high-efficiency, particulate air (HEPA) filters).

Avoid breathing product vapors, spray mist, and residue. Avoid breathing processing fumes. Avoid skin contact. Avoid eye contact. Avoid ingestion.

Spilled material may cause the floor or contaminated area to become slippery.

SECTION X - REGULATORY INFORMATION

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CHEMICAL	CAS NUMBER	PERCENTAGE
N-METHYL-2-PYRROLIDONE	872-50-4	62.172070
NAPHTHALENE	91-20-3	0.787832

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs), under the reporting requirements of 40 CFR 61. This product contains the following HAPs:

CHEMICAL	CAS NUMBER	PERCENTAGE
Naphthalene	91-20-3	0.787832

TOXIC SUBSTANCES CONTROL ACT (TSCA): All chemicals in this product appear in the Toxic Substance Control Act Chemical Substance Inventory.

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