



SAFETY DATA SHEET
ATC-LV3 Anti-Eutectic Coating

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: ATC-LV3

Other Names: Anti-eutectic coating
Anti-eutectic coating for graphite
Anti-eutectic coating for carbon fiber composites (cfc/cc)
Aluminum oxide anti-eutectic coating

Product Code: Single Component System

Primary Use: Anti-Eutectic coating used for preventing eutectic reactions.

Identified Uses: Applications include but are not limited to the following:

- Physical and reaction barrier for carbon-based components used in vacuum
- Seal porous graphite plates, insulation, and felt
- Seal porous carbon fiber composites (cfc/cc)
- Reduce dusting and erosion during high-velocity gas quenching

Distributor: Manufactured exclusively for,
CeraMaterials
525 Silver Lake Rd
Dingmans Ferry, PA 18328
Emergency Contact: Jerry Weinstein
Product Stewardship: 518.701.6722
E-Mail: sales@ceramaterials.com

Manufacturer: Astro Chemical Company, Inc
PO Box 1250, 3 Mill Road Extension
Ballston Lake, NY 12019
Product Stewardship: 518.399.5338
E-Mail: sales@astrochemical.com

24hr Emergency Contact Info:

CHEMTREC US Transportation: 800.424.9300
CHEMTREC International Transportation: 703.741.5500



SECTION 2 - HAZARDS IDENTIFICATION

GHS Classifications.

Health:

- Skin Sensitization, Category 1
- Skin Corrosion, Category 2
- Eye irritation, Category 2
- Reproductive Toxicity, Category 1B
- Target Organ Toxicity (Single Exposure), Category 3

Physical:

- Flammable liquids, Category 2

Signal word, symbols, hazard and precautionary statements:

Hazard Pictogram(s)



Signal Word

Danger

Hazard Statements

- Highly flammable liquid and vapour
- Causes skin irritation
- May cause an allergic skin reaction
- Causes serious eye irritation
- May cause drowsiness or dizziness
- May damage fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary Statements

Prevention:

- Obtain special instructions before use
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Avoid breathing dust / fume / gas / mist / vapours / spray



- Wash . . . Thoroughly after handling
- Contaminated clothing should not be allowed out of the workplace
- Avoid release to the environment
- Wear protective gloves / protective clothing / eye protection / face protection
- Use personal protective equipment as required

Response:

- IF ON SKIN: Wash with plenty of water / . . .
- If skin irritation or rash occurs: Get medical advice / attention
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Wash contaminated clothing before reuse
- If eye irritation persists: Get medical advice / attention
- IF INHALED: Remove person to fresh air and keep comfortable for breathing
- If exposed or concerned: Get medical advice / attention

Storage:

- Store in a well-ventilated place. Keep cool
- Store locked up

Disposal:

- Dispose of contents / container in accordance with local / regional / national / International regulations

Hazards not otherwise classified: Not available.

Emergency Overview:

Physical Appearance: Liquid

Immediate Concerns: May be slightly toxic and may be harmful if swallowed. May cause skin sensitization. May possibly cause pulmonary sensitization. May be irritating to the eyes and skin.

Potential Health Effects:

Eyes: Contact may cause eye irritation.
Skin: Irritating to skin. May cause sensitization by skin contact.
Skin Absorption: Not available.
Ingestion: Harmful if swallowed.
Inhalation: May cause irritation to nose and throat. May cause respiratory tract irritation.

Reproductive Toxicity:

Reproductive effects: Refer to Section 11 for additional information.



Teratogenic effects: Not available.

Carcinogenicity: Refer to section 11 for additional details regarding this statement.

Mutagenicity: Not available.

Medical Conditions Aggravated: Pre-existing skin disorders may be aggravated by over-exposure to this product.

SECTION 3 - COMPOSITION

<u>Chemical & Common Name</u>	<u>CAS#</u>	<u>% By Weight</u>
Non-Hazardous Filler (1)	Trade Secret	30 - 60
Resin (1)	Trade Secret	20 - 40
Propylene Glycol Monomethyl Ether	107-98-2	5 - 15
2-butanone	78-93-3	5 - 15
Acetone	67-64-1	5 - 10

SECTION 4 - FIRST AID MEASURES

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin, and eye contact, and ingestion.

Eyes:

In case of eye contact immediately flush abundantly with water; have eye bath available if possible. Do not rub eyes. Get medical attention, if irritation persists.

Skin:

In case of skin contact, wash affected areas with soap and water. Get medical attention, if irritation persists.

Ingestion:

Get immediate medical attention. Do not induce vomiting unless instructed to do so by a poison center or physician.

Inhalation:

Move exposed person to fresh air. Keep person warm and at rest. If breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if adverse health effects persist or are severe.



Signs and symptoms of overexposure.

Eyes:

Adverse symptoms may include the following: pain, irritation, watering, and/or redness.

Skin:

Adverse symptoms may include the following: irritation and/or redness.

Skin Absorption:

Not available.

Ingestion:

Not available

Inhalation:

Adverse symptoms may include the following: respiratory tract irritation, coughing.

Acute effects:

Not available.

Chronic effects:

Not available.

Notes to Physicians:

Treatment is symptomatic and supportive.

SECTION 5 - FIRE FIGHTING MEASURES

Extinguishing media.

Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

Hazardous combustion products.

Decomposition products may include the following materials: Carbon oxides.

Explosion hazards.

If in fire or if heated, a pressure increase will occur and the container may burst.

Fire fighting procedures.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.



Fire fighting equipment.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Fire explosion.

Not available.

Sensitive to static discharge.

Not available

Sensitivity to Impact.

Not available

Hazardous decomposition products.

Not available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Small Spill.

Stop leak if without risk. Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

Environmental precautions.

Water spill: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

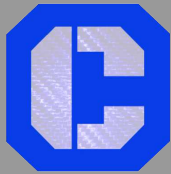
General procedures.

Do not touch or walk through spilled material. Use appropriate personal protective equipment.

SECTION 7 - HANDLING AND STORAGE

Handling.

Put on appropriate personal protective equipment. Eating, drinking, and smoking should be prohibited where this material handled, stored and processed. Workers should wash hands and face before eating, drinking, and smoking. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Empty containers retain product residue and can be hazardous. Do not reuse container. Refer to Section 8 for additional information.



Storage.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool, and well-ventilated area. Keep container tightly closed and sealed until ready to use.

Storage temperature.

Store in accordance with local regulations. Store in original container in a dry, cool and well-ventilated area. Do not store in unlabeled containers.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

Chemical Name	EXPOSURE LIMITS			
	Type		ppm	mg/m ³
Resin (1)	OSHA PEL	TWA	Not established	Not established
	ACGIH TLV	TWA	Not established	Not established
Propylene Glycol Monomethyl Ether	OSHA PEL	TWA	100	360
	ACGIH TLV	STEL	150	540
		TWA	100	369
		STEL	150	553
2-butanone	OSHA PEL	TWA	200	590
	ACGIH TLV	STEL	300	885
		TWA	200	Not available
		STEL	300	Not available
Acetone	OSHA PEL	TWA	1000	2400
	ACGIH TLV	STEL	1000	2400
		TWA	500	Not available
		STEL	750	Not available

Engineering controls.

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapors or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep workers exposure to airborne contaminants below any recommended or statutory limits.

**Individual protection measures, such as personal protective equipment.****Eyes and face:**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. As necessary, wear goggles or safety glasses with side shields.

Skin:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory:

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Protective Clothing:

Long sleeves, long trousers to protect skin from contact.

Work hygienic practices:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Ensure that eyewash stations and safety showers are close to the workstation.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid	Vapor density:	> 1
Appearance:	Silver / Gray liquid	Boiling point:	Not available
Odor:	Not available	Freezing point:	Not available
Odor threshold:	Not available	Thermal decomposition:	Not available
pH:	Not available	Solubility in water:	Negligible
Percent volatile:	Not available	Evaporation rate:	Not available
Flash point and method:	-15.6 - 10°C (3.9 - 14°F) Setflash Notes: Lowest Flashing component	Specific gravity:	1.35 to 1.40
Flammable limits:	3.0% (v) to 16% (v) Notes: Based on component data	Viscosity:	Not available
Autoignition temperature:	Not determined	Oxidizing properties:	Not available
Vapor pressure:	Negligible	Partition coefficient (n-octanol/water):	Not available



SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Stable under normal conditions.

Hazardous polymerization: Product can undergo hazardous polymerization. Avoid exposure to heat above 95°C (203°F)

Stability: This product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid: Oxidizing materials.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Hazardous decomposition products: Carbon monoxide, aldehydes, and acids.

Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials, strong acids, and strong alkalis.

SECTION 11 - TOXICOLOGICAL INFORMATION

<u>Chemical Name</u>	<u>Oral LD₅₀ (rat)</u>		<u>Dermal LD₅₀ (rabbit)</u>		<u>Inhalation LC₅₀ (rat)</u>
Resin (1)	> 2000	mg/kg Rat	> 2000	mg/kg Rat	No data available
Propylene Glycol Monomethyl Ether	7200	mg/kg Rat	13000	mg/kg Rabbit	10000 ppm Rat (4h)
2-butanone	2300 - 3500	mg/kg Rat	> 5000	mg/kg Rabbit	11700 mg/l Rat
Acetone	> 5800	mg/kg Rat	> 7426	mg/kg Rabbit	76 mg/l Rat

Skin corrosion / irritation:
Not available.

Serious eye damage / irritation:
Not available.

Respiratory or skin sensitization:
Contains a component (or components) which may cause sensitization by skin contact.

Germ cell mutagenicity:
Not available.



Carcinogenicity:

<u>Chemical Name</u>	<u>NTP Status</u>	<u>IARC Status</u>	<u>OSHA Status</u>
Resin (1)	Not listed	Not classified	Not regulated
Propylene Glycol Monomethyl Ether	Not listed	Not classified	Not regulated
2-butanone	Not listed	Not classified	Not regulated
Acetone	Not listed	Not classified	Not regulated

Reproductive toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

STOT-Single exposure:

Contains a component(s) which may cause central nervous system depression. As a result, the material may cause drowsiness and/or dizziness.

STOT-Repeated exposure:

Not available.

Aspiration hazard:

Not available.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Data: Not available

Ecotoxicological Information: Not available

Bioaccumulation / Accumulation: Not available

Distribution: Not available

Aquatic Toxicity (Acute):

96-Hour LC₅₀: Not available

48-Hour EC₅₀: Not available

96-Hour EC₅₀: Not available

Chemical Fate Information: Not available



SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method:

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Product Disposal:

Any disposal practice must be in compliance with all local and national laws and regulations. Do not dump into any sewers, on the ground, or into any body of water.

Empty Container:

Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been cleaned or reconditioned.

SECTION 14 - TRANSPORT INFORMATION

DOT (Department of Transportation)

Proper Shipping Name:	Resin solution
Primary Hazard Class / Division:	3
UN / NA Number:	1866
Packing Group:	II
Reportable Quantity (RQ) Under CERCLA:	No
Label:	Class 3 (Flammable)

Air (ICAO / IATA)

Shipping Name:	Resin solution
UN / NA Number:	1866
Primary Hazard Class / Division:	3
Packing Group:	II
Label:	Class 3 (Flammable)

Vessel (IMO / IMDG)

Shipping Name:	Resin solution
UN / NA Number:	1866
Primary Hazard Class / Division:	3
Packing Group:	II
Label:	Class 3 (Flammable)

Comments:

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.



SECTION 15 - REGULATORY INFORMATION

United States Regulations:

SARA Title III (Superfund Amendments and Reauthorization Act):

311 / 312 Hazard Categories: Immediate health hazard
Delayed health hazard

311 / 312 Physical Hazards: Flammable liquids

313 Reportable Ingredients: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title II, Section 313.

CERCLA Regulatory: None above reporting de minimis.

CERCLA (Comprehensive Response, Compensation, and Liability Act):

EPA:

EPA RQ Ingredient: Not available.

TSCA (Toxic Substance Control Act):

TSCA Status: All components are listed or exempted.

California Proposition 65:

This product contains a chemical known in the State of California to cause cancer.

Canadian Regulations:

WHMIS Hazard Symbol and Classification:



WHMIS (Workplace Hazardous Materials Information System):

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations. Class B2, Class D2A, Class D2B

WHMIS Class:

Domestic Substance List (Inventory):

The ingredients of this product are listed on the Domestic Substance List, Non-Domestic Substance List are exempt.

SECTION 16 - OTHER INFORMATION

Effective Date: March 3, 2016

Revision Date: 6/19/2020

Revision Summary: Company Information updated. SDS Prepared By: CeraMaterials

Manufacturer Supplemental Notes: Information Phone Number: (518) 399-5338

Additional SDS Information: Safety Data Sheet prepared in accordance with UNECE Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Fourth revision edition.

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