



SAFETY DATA SHEET

ARMOR POLY® VCI Films

1. IDENTIFICATION

Product Identifier

Product Name ARMOR POLY VCI (Mono, Co-Extruded, Foundry, ES, HD & Stretch Films)

Other means of identification

SDS # APPAC-005

Recommended use of the chemical and restrictions on use

Recommended Use Corrosion Resistant Plastic Packaging Material for Ferrous & Non-Ferrous Metals.

Details of the supplier of the safety data sheet**Supplier Address**

Armor Protective Packaging
1551 North Burkhart Rd
Howell, MI 48855

Emergency Telephone Number

Company Phone Number Phone: 1-517-546-1117
Fax: 1-517-546-6434

2. HAZARDS IDENTIFICATION

Appearance Clear or colored film (Sheets or bags) **Physical state** Solid **Odor** Bland to ammonia

Classification

This material is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

Other hazards

Harmful to aquatic life with long lasting effects

HNOCS are OSHA identified hazards that fall outside the scope of traditional classification. The material is hazardous, in this case it may be harmful if swallowed, but it does NOT require the traditional hazard information like a pictogram, hazard statement, etc

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No | Weight-% |
|---------------|-------------|----------|
| Proprietary | Proprietary | < 5% |

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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4. FIRST-AID MEASURES

First Aid Measures

| | |
|---------------------|----------------------------------------------------------------------------------------------------------------------|
| Eye Contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. |
| Inhalation | Remove to fresh air. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. |

Most important symptoms and effects

| | |
|-----------------|------------------------------|
| Symptoms | May be harmful if swallowed. |
|-----------------|------------------------------|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|---------------------------|------------------------|

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Protective equipment and precautions for firefighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| | |
|-----------------------------|------------------------------------------------|
| Personal Precautions | Use personal protective equipment as required. |
|-----------------------------|------------------------------------------------|

Methods and material for containment and cleaning up

| | |
|--------------------------------|-------------------------------------------------------|
| Methods for Containment | Prevent further leakage or spillage if safe to do so. |
| Methods for Clean-Up | Keep in suitable, closed containers for disposal |

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7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in a dry, cool and well-ventilated place.

Incompatible Materials Strong acids. Caustics.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------|----------------------------------------|-----------------------|------------------|
| Physical state | Solid | Odor | Bland to ammonia |
| Appearance | Clear or colored film (Sheets or bags) | Odor Threshold | Not determined |
| Color | Various | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|-------------------------------------|-------------------------|-------------------------|
| pH | Not determined | |
| Melting Point/Freezing Point | 103-115 °C / 219-239 °F | |
| Boiling Point/Boiling Range | Not determined | |
| Flash Point | Not determined | |
| Evaporation Rate | Not determined | |
| Flammability (Solid, Gas) | Not determined | |
| Flammability Limits in Air | | |

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| | |
|-------------------------------------|-----------------|
| Upper Flammability Limits | Not determined |
| Lower Flammability Limit | Not determined |
| Vapor Pressure | Not determined |
| Vapor Density | Not determined |
| Relative Density | 0.91- 1.05 |
| Water Solubility | Not determined |
| Solubility in other solvents | Not determined |
| Partition Coefficient | Not determined |
| Auto-ignition Temperature | 340 °C / 645 °F |
| Decomposition Temperature | Not determined |
| Kinematic Viscosity | N/A |
| Dynamic Viscosity | N/A |
| Explosive Properties | Not determined |
| Oxidizing Properties | Not determined |
| | |
| <u>Other Information</u> | |
| VOC Content | Not determined |

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Incompatible Materials.

Incompatible Materials

Strong acids. Caustics.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

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Inhalation Do not inhale.

Ingestion May be harmful if swallowed.

Component Information

| Chemical Name | ATE mix (oral) | ATE mix (dermal) | Inhalation LC50 |
|---------------|----------------------|------------------|--------------------------------------|
| Proprietary | = 4 g/kg (Rat) | - | - |
| Proprietary | = 4070 mg/kg (Rat) | - | - |
| Proprietary | = 825 mg/kg (Rat) | - | - |
| Proprietary | = 560 mg/kg (Rat) | > 1 g/kg (Rat) | = 1910 mg/m ³ (Rat) 3 h |
| Proprietary | > 10 g/kg (Rat) | - | - |

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATE mix (oral) 3,547.00 mg/kg
 ATE mix (dermal) 62,562.00 mg/kg
 ATE mix (inhalation-dust/mist) 89.53 mg/L

12. ECOLOGICAL INFORMATION

Eco-toxicity Harmful to aquatic life with long lasting effects

Component Information

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------|
| Proprietary | | 100: 96 h Pimephales promelas mg/L LC50 static 420 - 558: 96 h Pimephales promelas mg/L LC50 flow-through | 650: 48 h Daphnia magna mg/L EC50 |
| Proprietary | 15.4: 96 h freshwater algae mg/L EC50 | 39: 96 h Oncorhynchus mykiss mg/L LC50 | 141.6: 48 h water flea mg/L EC50 |

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

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Mobility

| Chemical Name | Partition Coefficient |
|---------------|-----------------------|
| Proprietary | -2.13 |

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

- Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.
- Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

- Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
- DOT** Not regulated
- IATA** Not regulated
- IMDG** This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL/NDSL | EINECS/E LINC S | ENCS | IECSC | KECL | PICCS | AICS |
|---------------|------|----------|-----------------|---------|-------|---------|-------|------|
| Proprietary | X | X | | Present | X | Present | X | X |
| Proprietary | X | X | X | Present | X | Present | X | X |
| Proprietary | X | X | X | Present | X | Present | X | X |
| Proprietary | X | X | X | Present | X | Present | X | X |
| Proprietary | X | X | X | Present | X | Present | X | X |
| Proprietary | X | X | X | Present | X | Present | X | X |

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINC S - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*



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ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---------------|--------------------------|----------------|--------------------------------------------|
| Proprietary | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |

SARA 313

| Chemical Name | CAS No | Weight-% | SARA 313 - Threshold Values % |
|---------------|--------|----------|-------------------------------|
| Proprietary - | | <5 | 1.0 |

CWA (Clean Water Act)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Proprietary | 5000 lb | | | X |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------|------------|---------------|--------------|
| Proprietary | X | X | X |
| Proprietary | | X | |

When certain chemicals are released into the environment or water supply in certain quantities, they must be reported to the EPA. This particular ingredient has a reporting threshold of 5,000 lbs

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16. OTHER INFORMATION

Issue Date: 20-November-2017
Revision Date: 14-August-2019
Revision Note: Redundant statements removed from section 8 and 16

Disclaimer

The information provided in this 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.

End of Safety Data Sheet

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