

SAFETY DATA SHEET

ARMIDAN^(R) NT-7410



Section 1. Identification

GHS product identifier : ARMIDAN^(R) NT-7410
Chemical name : Not applicable
Other means of identification : Coupling Agent
Product type : Mixture

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Supplier's details : SACO AEI Polymers, Inc.
3220 Crocker Avenue
Sheboygan, WI 53081 USA
+1(920) 803-0778 ph. / +1(920)803-0779 fax
Mon.-Fri. 8:00AM-5:00 PM

Emergency telephone number (with hours of operation) : SACO AEI Polymers, Inc.
3220 Crocker Avenue
Sheboygan, WI 53081 USA
+1(920) 803-0778 ph. / +1(920)803-0779 fax
Mon.-Fri. 8:00AM-5:00 PM

Section 2. Hazards identification

OSHA/HCS status : This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture : This material is a mixture of components that are encapsulated in polymer which minimizes the potential risk for exposure. During normal processing some vapors may be released, so the end-user should take the necessary precautions (adequate ventilation) to protect employees from exposure. The product has not been tested as a whole for health effects, but the exposure effects are based on the existing data for the identified components.

GHS label elements

Signal word : Warning
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : This material is a mixture of components that are encapsulated in polymer which minimizes the potential risk for exposure. During normal processing some vapors may be released, so the end-user should take the necessary precautions (adequate ventilation) to protect employees from exposure. The product has not been tested as a whole for health effects, but the exposure effects are based on the existing data for the identified components.
Prevention : Do not breathe dust/fume/gas/mist/vapors/spray.
Response : Wash with plenty of soap and water.
Storage : Store container tightly closed in well-ventilated place.
Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 2. Hazards identification

Supplemental label elements :

Hazards not otherwise classified :

Section 3. Composition/information on ingredients

Substance/mixture : This material is a mixture of components that are encapsulated in polymer which minimizes the potential risk for exposure. During normal processing some vapors may be released, so the end-user should take the necessary precautions (adequate ventilation) to protect employees from exposure. The product has not been tested as a whole for health effects, but the exposure effects are based on the existing data for the identified components.

Chemical name : Not applicable

Other means of identification : Coupling Agent

CAS number/other identifiers

CAS number : Not applicable

Product code :

Ingredient name	%	CAS number
maleic anhydride	Trace	108-31-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Remove contact lenses if worn. Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids open. Do not rub. Seek medical attention if irritation persists.
- Inhalation** : Move exposed person to non-contaminated air. Assist breathing if necessary. Seek medical attention if unconscious, or if other symptoms persist. Inhalation of smoke following a fire may result in delayed pulmonary edema; seek immediate medical attention.
- Skin contact** : Remove dusty or contaminated clothing. Wash affected area with mild soap and water. Seek medical attention if irritation persists.
In case of contact with molten product, cool rapidly with water and seek medical attention. DO NOT attempt to remove molten product, or molten product that has been cooled, from the skin because skin will tear easily.
- Ingestion** : Material is not expected to be absorbed from the gastrointestinal tract. Do not induce vomiting. Seek medical attention if any discomfort or other symptoms persist.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Particulates may scratch eye surface/cause mechanical irritation.
- Inhalation** : Not considered hazardous in its present form. However, vapors which may be formed at elevated temperatures may be irritating if inhaled.
- Skin contact** : No known significant effects or critical hazards.

Section 4. First aid measures

Ingestion : According to our database, the product will not enter the human body easily. No known significant effects or critical hazards. However, in compliance with good industrial hygiene practice, exposure to any chemical should be kept to a minimum.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : No specific information is available in our database regarding the other toxic effects of this material for humans.

Specific treatments : No specific treatment. Treat symptomatically. Call medical doctor or poison control center immediately if large quantities have been ingested.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : In case of fire, use water spray (fog), foam, dry chemical or CO₂. Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials: Carbon dioxide (CO₂), carbon monoxide

Special protective actions for fire-fighters : No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

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

Remark : No additional remark.

Remark : No additional remark.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Immediately contact emergency personnel. Keep unnecessary and unprotected personnel from entering.

For emergency responders : Put on appropriate personal protective equipment (see Section 8). Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. No specific hazard.

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

- Small spill** : If emergency personnel are unavailable, vacuum or carefully scoop up spilled material and place in an appropriate container for disposal. Dispose of via a licensed waste disposal contractor.
- Large spill** : Immediately contact emergency personnel. If emergency personnel are unavailable, vacuum or carefully scoop up spilled material and place in an appropriate container for disposal. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Wear appropriate respirator when ventilation is inadequate.
- Advice on general occupational hygiene** : After handling, always wash hands thoroughly with soap and water. Avoid contact of spilled material and runoff with soil and surface waterways. Contains refrigerated gas.

- Conditions for safe storage, including any incompatibilities** : Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
maleic anhydride	ACGIH TLV (United States, 2/2010). Skin sensitizer. TWA: 0.1 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 0.25 ppm 8 hours. TWA: 1 mg/m ³ 8 hours. NIOSH REL (United States, 6/2009). TWA: 1 mg/m ³ 10 hours. TWA: 0.25 ppm 10 hours. OSHA PEL (United States, 6/2010). TWA: 0.25 ppm 8 hours. TWA: 1 mg/m ³ 8 hours.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : No specific hazard. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Individual protection measures

- Hygiene measures** : 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.
- Eye/face protection** : safety glasses with side-shields.
- Skin protection**
- Hand protection** : disposable vinyl
- Body protection** : 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.
- Other skin protection** : No additional remark.
- Respiratory protection** : disposable particulate mask

Section 8. Exposure controls/personal protection

Personal protective
equipment (Pictograms)



Section 9. Physical and chemical properties

Appearance

Physical state	: Solid.
Color	: Colorless.
Odor	: Odorless.
Odor threshold	:
pH	:
Melting point	:
Boiling point	:
Flash point	:
Evaporation rate	:
Flammability (solid, gas)	:
Lower and upper explosive (flammable) limits	:
Vapor pressure	:
Vapor density	:
Relative density	:
Solubility	:
Partition coefficient: n- octanol/water	:
Auto-ignition temperature	:
Decomposition temperature	:
Viscosity	:

Aerosol product

Section 10. Stability and reactivity

Reactivity	: Under normal conditions of storage and use, hazardous reactions will not occur.
Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Temperatures above 230 C
Incompatible materials	: Strong oxidizing materials strong acids
Hazardous decomposition products	: Decomposition products may include the following materials: carbon oxides (CO, CO ₂)

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary

: No additional remark. This material is a mixture of components that are encapsulated in polymer which minimizes the potential risk for exposure. During normal processing some vapors may be released, so the end-user should take the necessary precautions (adequate ventilation) to protect employees from exposure. The product has not been tested as a whole for health effects, but the exposure effects are based on the existing data for the identified components.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact

: Particulates may scratch eye surface/cause mechanical irritation.

Inhalation

: Not considered hazardous in its present form. However, vapors which may be formed at elevated temperatures may be irritating if inhaled.

Skin contact

: No known significant effects or critical hazards.

Ingestion

: According to our database, the product will not enter the human body easily. No known significant effects or critical hazards. However, in compliance with good industrial hygiene practice, exposure to any chemical should be kept to a minimum.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

: No specific data.

Inhalation

: No specific data.

Skin contact

: No specific data.

Ingestion

: No specific data.

Section 11. Toxicological information

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No additional information.

Potential delayed effects : Not Known.

Long term exposure

Potential immediate effects : Not Known.

Potential delayed effects : Not Known.

Potential chronic health effects

Not available.

Conclusion/Summary : This material is a mixture of components that are encapsulated in polymer which minimizes the potential risk for exposure. During normal processing some vapors may be released, so the end-user should take the necessary precautions (adequate ventilation) to protect employees from exposure. The product has not been tested as a whole for health effects, but the exposure effects are based on the existing data for the identified components.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) :

Other adverse effects :

Section 13. Disposal considerations

Disposal methods :
Waste stream : No additional remark.
RCRA classification : Landfill

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name						
Transport hazard class(es)						
Packing group						
Environmental hazards						
Additional information						

Special precautions for user :

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : United States inventory (TSCA 8b) All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : No products were found.

Clean Air Act Section 602 Class I Substances : No products were found.

Clean Air Act Section 602 Class II Substances : No products were found.

DEA List I Chemicals (Precursor Chemicals) :

DEA List II Chemicals (Essential Chemicals) :

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ :

Section 15. Regulatory information

SARA 311/312

Classification :

Composition/information on ingredients

No products were found.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	maleic anhydride	108-31-6	Trace
Supplier notification	maleic anhydride	108-31-6	.1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

California Prop. 65

Not applicable

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Australia	:
Canada	:
China	:
Europe	:
Japan	:
Malaysia	:
New Zealand	:
Philippines	:
Republic of Korea	:
Taiwan	:

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	0
Flammability	1
Physical hazards	0

Caution: HMIS[®] ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS[®] ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS[®] ratings are to be used with a fully implemented HMIS[®] program. HMIS[®] is a registered mark of the National Paint & Coatings Association (NPCA). HMIS[®] materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of printing	: 9/20/2016.
Date of issue/Date of revision	: 9/20/2016.
Date of previous issue	: 4/25/2016.
Version	: 0.03
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

References :

Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.