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| SAFETY DATA SHEET | |  |
| Advantage II | | |
| Revision: 1.0 US | Issuing date: 05.26.15 | |

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Advantage II

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

Uses of the Substance / Mixture : Specific use(s): Wetting agent, Industrial use

1.3 Details of the supplier of the safety data sheet

Company : Aquatrols Corporation of America
1273 Imperial Way
Paulsboro, NJ 08066
Telephone number: 800-257-7797

1.4 Emergency telephone

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC 800-424-9300 within the United States and Canada, or 703-527-3887 for international collect calls.

SECTION 2: Hazards identification

Although OSHA has not adopted the environmental portion of the GHS regulations, this document may include information on environmental effects.

2.1 Classification of the substance or mixture

HCS 2012 (29 CFR 1910.1200)

Not a hazardous product according to Globally Harmonized System (GHS)

2.2 Label elements

HCS 2012 (29 CFR 1910.1200)

Not a hazardous product according to Globally Harmonized System (GHS)


2.3 Other hazards which do not result in classification

Slightly irritating to eyes and skin.

No specific risk when handled in accordance with good occupational hygiene and safety practice.

NO particular fire or explosion hazard.

Hazardous reactions may occur on contact with certain chemicals. (Refer to the list of incompatible materials section 10: "Stability-Reactivity").

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SECTION 3: Composition/information on ingredients

3.1 Substance

Chemical nature : Ethylene oxide / propylene oxide block co-polymer blend

Hazardous Ingredients and Impurities

No ingredients are hazardous.

Non Hazardous Ingredients and Impurities

| Chemical Name | Identification number CAS-No. | Concentration [%] |
|---------------------------|----------------------------------|-------------------|
| Blend of nonionic polyols | Proprietary | 80.56 |
| Water soluble binder | Proprietary | 14.44 |


3.2 Mixture

Not applicable, this product is a substance.

SECTION 4: First aid measures

4.1 Description of first-aid measures

- If inhaled : Negligible or unlikely exposure pathways
If breathed in, move person into fresh air.
Consult a physician if necessary.
- Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Call a physician if irritation develops or persists.
Wash contaminated clothing before re-use.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Consult a physician if necessary.
- Ingestion : Do not induce vomiting without medical advice.
If victim is conscious:
Rinse mouth with water.
Keep at rest.
Do not leave the victim unattended.
Vomiting may occur spontaneously
Risk of product entering the lungs on vomiting after ingestion.
Lay victim on side.
Seek medical advice.

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4.2 Most important symptoms and effects, both acute and delayed

Risks : Skin contact may aggravate existing skin disease

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Treat symptomatically.
There is no specific antidote available.

SECTION 5: Firefighting measures

Flash point : >399 °F (204 °C)
Pensky-Martens closed cup

Flammability class: Will burn

Autoignition temperature : no data available

Flammability / Explosive limit : no data available

5.1 Extinguishing media

Suitable extinguishing media : Extinguishing media - small fires
Dry chemical
Carbon dioxide (CO₂)
Extinguishing media - large fires
Foam
Water spray

Unsuitable extinguishing media : High volume water jet
(frothing possible)


5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting : Under fire conditions:
Will burn
On combustion or on thermal decomposition (pyrolysis), releases:
Carbon oxides

5.3 Advice for firefighters

Special protective equipment for fire-fighters : Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Specific fire fighting methods : Do not use a solid water stream as it may scatter and spread fire.

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Further information : Cool containers/tanks with water spray.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions, protective equipment and emergency procedures : Wear suitable protective equipment.
For further information refer to section 8 "Exposure controls / personal protection."

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies

6.3 Methods and materials for containment and cleaning up

Methods for containment : Dam up with sand or inert earth (do not use combustible materials).

Recovery : Soak up with inert absorbent material.
Sweep up and shovel into suitable containers for disposal.
Never return spills in original containers for re-use.


Decontamination / cleaning : Wash nonrecoverable remainder with large amounts of water.
Clean contaminated surface thoroughly.
Recover the cleaning water for subsequent disposal.
Decontaminate tools, equipment and personal protective equipment in a segregated area.

Disposal : Dispose of in accordance with local regulations.

Additional advice : Material can create slippery conditions.

6.4 Reference to other sections

Reference to other sections : 7. HANDLING AND STORAGE
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
13. DISPOSAL CONSIDERATIONS

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Technical measures : Ethylene oxide may collect in container head space.
Provide adequate ventilation.
- Advice on safe handling and usage : Avoid inhalation of vapor or mist.
Avoid contact with skin and eyes.
- Hygiene measures : Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:
 - 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
 - 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
 - 3) Wash exposed skin promptly to remove accidental splashes or contact with material.

7.2 Conditions for safe storage, including any incompatibilities

- Technical Measures for storage : Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

Storage conditions


- Recommended : Keep container tightly closed in a dry and well-ventilated place.
- To be avoided : Keep away from open flames, hot surfaces and sources of ignition.
Keep away from incompatible materials to be indicated by the manufacturer
- Incompatible products : Strong bases
Strong oxidizing agents
Strong reducing agents.

Storage stability

- Storage temperature : no data available

7.3 Specific end use(s)

no data available

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SECTION 8: Exposure controls/personal protection

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Control measures

Engineering measures : Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures :

Effective exhaust ventilation system

Personal protective equipment

Respiratory protection : When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

No personal respiratory protective equipment normally required.


Hand protection : Where there is a risk of contact with hands, use appropriate gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves must be inspected prior to use. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through the use of:

Safety glasses with side-shields

Skin and body protection : Recommended preventive skin protection
 impervious clothing
 Footwear protecting against chemicals
 Choose body protection according to the amount and concentration of the

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dangerous substance at the work place.

Hygiene measures : Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:

- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes or contact with material.

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
 Emergency equipment immediately accessible, with instructions for use.
 The protective equipment must be selected in accordance with current local standards and in cooperation with the supplier of the protective equipment.
 Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.

SECTION 9: Physical and chemical properties

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

9.1 Information on basic physical and chemical properties

| | | |
|-------------------------------------|---|--|
| Appearance | : | Form : pellet Physical state: solid Color: white |
| Odor | : | slight |
| Odor Threshold | : | no data available |
| pH | : | no data available |
| Freezing point | : | no data available |
| Boiling point/boiling range | : | no data available |
| Flash point | : | no data available |
| Evaporation rate (Butylacetate = 1) | : | no data available |
| Flammability (solid, gas) | : | no data available |

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| Flammability (liquids) | : | no data available |
| Flammability / Explosive limit | : | no data available |
| Autoignition temperature | : | no data available |
| Vapor pressure | : | no data available |
| Vapor density | : | no data available |
| Solubility | : | <u>Water solubility</u> : soluble |
| Partition coefficient: n-octanol/water | : | no data available |
| Thermal decomposition | : | no data available |
| Viscosity | : | no data available |
| Explosive properties | : | no data available |
| Oxidizing properties | : | no data available |

9.2 Other information

Volatiles by Volume : 0%

SECTION 10: Stability and reactivity**10.1 Reactivity**

no data available

10.2 Chemical stability

Chemical stability : Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Polymerization : Hazardous polymerization does not occur.

10.4 Conditions to avoidConditions to avoid : Keep away from heat and sources of ignition.
Keep away from flames and sparks.

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10.5 Incompatible materials

Materials to avoid : Strong bases
Strong oxidizing agents
Strong reducing agents

10.6 Hazardous decomposition products

Decomposition products : On combustion or on thermal decomposition (pyrolysis), releases:
Carbon oxides

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity**

Acute oral toxicity : LD50 : 10,200 mg/kg - Rat
By analogy

Acute inhalation toxicity : no data available

Acute dermal toxicity : no data available

Acute toxicity (other routes of administration) : no data available

Skin corrosion/irritation

Skin irritation : Rabbit
Slightly irritating to rabbits on cutaneous application.
By analogy

Serious eye damage/eye irritation

Eye irritation : Rabbit
slight irritation
By analogy

Respiratory or skin sensitization

Sensitization : no data available


Mutagenicity

Genotoxicity in vitro : no data available

Genotoxicity in vivo : no data available

Carcinogenicity

Carcinogenicity : no data available

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This product does not contain any ingredient designated as probable or suspected human carcinogens by:

NTP
IARC
OSHA
ACGIH

Toxicity for reproduction and development

Toxicity to reproduction / fertility : no data available

Developmental Toxicity/Teratogenicity : no data available

STOT

STOT-single exposure : no data available

STOT-repeated exposure : no data available

Aspiration toxicity

Aspiration toxicity : no data available

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil


no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

Advice on Disposal : Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Waste Code : EPA:
Hazardous Waste – NO

Advice on cleaning and disposal of packaging

Advice on Disposal : Rinse with an appropriate solvent.
Dispose of contents/container in accordance with local regulation.

SECTION 14: Transport information


DOT
not regulated

TDG
not regulated

IMDG
not regulated

IATA
not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

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SECTION 15: Regulatory information

15.1 Notification status

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| United States TSCA Inventory | : YES (positive listing) On TSCA Inventory |
| Canadian Domestic Substances List (DSL) | : YES (positive listing) All components of this product are on the Canadian DSL. |
| Australia Inventory of Chemical Substances (AICS) | : YES (positive listing) On the inventory, or in compliance with the inventory |
| Japan. CSCL - Inventory of Existing and New Chemical Substances | : YES (positive listing) On the inventory, or in compliance with the inventory |
| Korea. Korean Existing Chemicals Inventory (KECI) | : YES (positive listing) On the inventory, or in compliance with the inventory |
| China. Inventory of Existing Chemical Substances in China (IECSC) | : YES (positive listing) On the inventory, or in compliance with the inventory |


15.2 Federal Regulations

SARA 311/312 Hazards

| | |
|-----------------------------------|----|
| Fire Hazard | no |
| Reactivity Hazard | no |
| Sudden Release of Pressure Hazard | no |
| Acute Health Hazard | no |
| Chronic Health Hazard | no |

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

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

| Ingredients | CAS-No. | Reportable quantity |
|-----------------|----------|---------------------|
| Ethylene Oxide | 75-21-8 | 10 lb |
| 1,4-Dioxane | 123-91-1 | 100 lb |
| Propylene Oxide | 75-56-9 | 100 lb |

SARA 304 Reportable Quantity

| Ingredients | CAS-No. | Reportable quantity |
|-----------------|---------|---------------------|
| Ethylene Oxide | 75-21-8 | 10 lb |
| Propylene Oxide | 75-56-9 | 100 lb |

SARA 302 Reportable Quantity

| Ingredients | CAS-No. | Reportable quantity |
|-----------------|---------|---------------------|
| Ethylene Oxide | 75-21-8 | 10 lb |
| Propylene Oxide | 75-56-9 | 100 lb |

15.3 State Regulations

California Prop 65

: WARNING! This product contains a chemical known in the State of California to cause cancer.
 1,4-Dioxane
 Ethylene Oxide
 Propylene Oxide

WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.
 Ethylene Oxide

No Significant Risk Levels (NSRLs) have been established for the following:
 1,4-Dioxane
 Value : 30 micrograms per day

Ethylene Oxide
 Value : 2 micrograms per day


SECTION 16: Other information

NFPA-Classification

Health : 1 slight
 Flammability : 1 slight
 Instability or Reactivity : 0 minimal

HMIS-Classification

Health : 1 slight
 Flammability : 1 slight
 Reactivity : 0 minimal

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Further information

Date Prepared : 05.26.15
 Further information : Product classified under the US GHS format.

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH : American Conference of Governmental Industrial Hygienists
 OSHA : Occupational Safety and Health Administration
 WHMIS : Workplace Hazardous Materials Information System
 NTP : National Toxicology Program
 IARC : International Agency for Research on Cancer
 AEL : Acceptable Exposure Limit
 NIOSH : National Institute for Occupational Safety and Health
 NFPA : National Fire Protection Association
 HMIS : Hazardous Materials Identification System (Paint & Coating)

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. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose, and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in another manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.