

2084

ASHLAND
SAFETY DATA SHEET

Page: 1
Revision Date: 02/12/2008
Print Date: 11/2/2008
MSDS Number: R0275693
Version: 1.4

ADVANTAGE PLUS® 6445 DEPOSIT
INHIBITOR 100536

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	ADVANTAGE PLUS® 6445 DEPOSIT INHIBITOR
Product code	100536
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid,, clear

**WARNING! MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION.
HARMFUL IF SWALLOWED. CAUSES EYE IRRITATION.**

Potential Health Effects

Routes of exposure

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause severe eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure eye tissue.

Skin contact

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

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It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions)

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways)

Target Organs

No data

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

This material (or a component) has been shown to cause birth defects in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Based on the available information, risk to the fetus from maternal exposure to this material cannot be assessed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
SALT	NJTS# 254504001-5150	>=10-<15%
ORGANIC SALT	NJTS# 254504001-5208	>=1.5-<5%
ORGANIC SALT	NJTS# 254504001-5207	>=1-<1.5%

4. FIRST AID MEASURES

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Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Notes to physician

Hazards: No information available.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Foam, Water spray, Carbon dioxide (CO₂), Dry chemical

Hazardous combustion products

carbon dioxide and carbon monoxide, nitrogen oxides, hydrocarbons

Precautions for fire-fighting

No special fire hazards are known to be associated with this product. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

6. ACCIDENTAL RELEASE MEASURES

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Personal precautions

No data

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Flush area with water. Absorb liquid on vermiculite, floor absorbent or other absorbent material.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage

Keep from freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

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Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

Eye protection

Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)

Skin and body protection

To prevent skin contact, wear impervious clothing and boots.
Wear resistant gloves such as:
polyvinyl chloride

Respiratory protection

Exposures in the workplace should be monitored to determine if worker exposure to vapor or mist air concentrations exceeds the facility specified exposure "action level" or the use of the product produces adverse health effects or symptoms of exposure. Only a NIOSH-approved respirator and cartridge (TC-23C) is to be used. Monitoring results must be used to assess the proper level of respiratory protection necessary (such as: full face piece respirator with chemical cartridges or self-contained breathing apparatus {scuba}, etc.). Proper engineering and/or administrative controls should be used to reduce worker exposure. The facility's respiratory protection program must meet the requirements established in 29 CFR 1910.134, which includes a program for medical evaluation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	No data
Colour	clear, light brown
Odour	No information available.
Boiling point/boilingrange	100.00 °C / 212 °F @ 1,013.33 hPa
pH	7
Flash point	No data
Evaporation rate	No data
Explosion limits	No data
Vapour pressure	23.33 hPa @ 68 °F / 20 °C
Vapour density	(>) 1 (AIR=1)
Density	1.150 g/cm ³ @ 77.00 °F / 25.00 °C

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	No data
Solubility	No data
Partition coefficient: n- octanol/water	No data
Autoignition temperature	No data

10. STABILITY AND REACTIVITY

Stability
Stable.

Conditions to avoid

Incompatible products
strong mineral acids, strong organic acids.

Hazardous decomposition products
carbon dioxide and carbon monoxide, nitrogen oxides (NOx), hydrocarbons

Hazardous reactions
Product will not undergo hazardous polymerization.

Thermal decomposition
No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

SALT LD 50 Rat: 6,200 mg/kg

ORGANIC SALT LD 50 Rat: 3,030 mg/kg

No data

Acute inhalation toxicity

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No data
No data
No data

Acute dermal toxicity
No data

ORGANIC SALT

LD 50 Rabbit: > 5,000 mg/kg

No data

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

96 h LC 50 *Oncorhynchus mykiss* (rainbow trout), static test: 5,359 mg/l

96 h LC 50 *Pimephales promelas* (fathead minnow), static test: 3,536 mg/l

Acute Toxicity to Aquatic Invertebrates

48 h LC 50 *Daphnia magna* (Water flea), static test: 3,536 mg/l

Environmental fate and pathways

BOD5: 53,580 mg/l

: 162,000 mg/l

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and

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waste stream reduction, contact Ashland Distribution's Environmental Services Group at
800-637-7922.

14. TRANSPORT INFORMATION

Dangerous goods descriptions (if indicated above) may not reflect package size, quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

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

NICKEL
LEAD
CADMIUM
ARSENIC

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

CADMIUM
LEAD
MERCURY

SARA Hazard Classification Acute Health Hazard

SARA 313 Component(s)

	Health	Flammability	Reactivity	Other
HMIS	1*	0	0	
NFPA	1	0	0	

16. OTHER INFORMATION

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The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).