



Print Date: 3/19/2015 MSDS Number: R0700134

Version: 1.0

Advantage™ 1529 Defoaming Agent

Trademark, Solenis or its subsidiaries or affiliates, registered in various countries
423985

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

Solenis LLC

Contact us at

www.solenis.com

500 Hercules Road

Wilmington, Delaware 19808

Emergency telephone number

1-844-SOLENIS (844-765-3647) /

606-329-5705

Product name

Advantage™ 1529 Defoaming Agent

™ Trademark, Solenis or its subsidiaries or affiliates, registered in various

countries

Product code

423985

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, colourless

NOTICE: WHILE THIS MATERIAL HAS A LOW LEVEL OF TOXICITY, GOOD INDUSTRIAL HYGIENE PRACTICES ARE ENCOURAGED TO MINIMIZE EXPOSURE.

Potential Health Effects

Exposure routes

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

Eye contact

Unlikely to cause eye irritation or injury.

Skin contact

Unlikely to cause skin irritation or injury.

Ingestion

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

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

No data.

Symptoms

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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)

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

There are no data available for assessing risk to the fetus from maternal exposure to this material.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Components | CAS-No. / Trade Secret No. | Concentration |
|----------------------|----------------------------|---------------|
| Alkoxylated Alcohol | 254504001-6427 | >=90-<=100% |

4. FIRST AID MEASURES

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

First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

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, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.



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Treatment: No hazards which require special first aid measures.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO2), Water spray

Hazardous combustion products

carbon dioxide and carbon monoxide, Hydrocarbons

Precautions for fire-fighting

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. 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 material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Other information

Comply with all applicable federal, state, and local regulations.

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





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Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Contains no substances with occupational exposure limit values.

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

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves (consult your safety equipment supplier).

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical state | liquid | |
|-----------------------------|------------------------------------|--|
| Colour | colourless | |
| Odour | odourless | |
| Boiling point/boiling range | > 392 °F / > 200 °C @ 1,013.00 hPa | |
| На | 6.5 - 7.5 | |
| Flash point | > 212 °F / > 100 °C | |
| Ignition temperature | > 200.00 °C | |





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| Vapour pressure | No data available |
|--------------------|-------------------|
| Density | 0.98 g/cm3 |
| Water solubility | insoluble |
| Viscosite | 200 |
| Viscosity, dynamic | 300 mPa.s |

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

None known.

Incompatible products

None known.

Hazardous decomposition products

carbon dioxide and carbon monoxide, Hydrocarbons

Hazardous reactions

Product will not undergo hazardous polymerization.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of

exposure

Inhalation

Skin absorption

Skin contact Eye Contact Ingestion

Product

Acute oral toxicity

: LD 50Rat

> 10,000 mg/kg

Acute inhalation toxicity

: No data available

Acute dermal toxicity

: No data available





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Skin corrosion/irritation

: Result: Not irritating to skin

Serious eye damage/eye

irritation

Result: Not irritating to eyes

Respiratory or skin sensitisation

: No data available

Components:

Alkoxylated Alcohol:

Acute oral toxicity

: LD 50 Rat: > 10,000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity Product:

Toxicity to fish

: LC 50 (Oncorhynchus mykiss (rainbow trout)): 140 mg/l

Exposure time: 96 h Test Method: static test

LC 50 (Cyprinodon variegatus (sheepshead minnow)): > 1,000

mg/l

Exposure time: 96 h
Test Method: static test

Toxicity to daphnia and other

aquatic invertebrates

: EC 50 (Water flea (Daphnia magna)): 610 mg/l

Exposure time: 48 h
Test Method: static test

Toxicity to bacteria

(Bacteria): > 2,000 mg/l

Components:

Alkoxylated Alcohol:

Toxicity to fish

: LC 50 (Oncorhynchus mykiss (rainbow trout)): 140 mg/l

Exposure time: 96 h Test Method: static test

LC 50 (Cyprinodon variegatus (sheepshead minnow)): > 1,000

mg/l

Exposure time: 96 h





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Test Method: static test

Toxicity to daphnia and other

aquatic invertebrates

: EC 50 (Water flea (Daphnia magna)): 610 mg/l

Exposure time: 48 h
Test Method: static test

Persistence and degradability

Product:

Biochemical Oxygen Demand

< 10 mg/g

(BOD)

5 d

Chemical Oxygen Demand

: 2,130 mg/g

(COD)

Components:

Alkoxylated Alcohol:

Biochemical Oxygen Demand

: < 10 mg/g

(BOD)

5 d

Chemical Oxygen Demand

(COD)

: 2,130 mg/g

Bioaccumulative potential

Product:

No data available

Components:

No data available

Mobility in soil

Product:

No data available

Components:

No data available

13. DISPOSAL CONSIDERATIONS

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Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations.

| REGULATION | | | | | |
|---------------------------------------|--------------------------|------------------|-----------------------|------------------|------------------------------------|
| ID NUMBER | PROPER SHIPPING NAME | *HAZARD CLASS | SUBSIDIARY HAZARDS | PACKING GROUP | MARINE POLLUTANT A LTD. QTY. |
| J.S. DOT - ROA | AD | | | | |
| | Not dangerous goods | | | | |
| J.S. DOT - RAI | L | | | | |
| | Not dangerous goods | | | | |
| J.S. DOT - INL | AND WATERWAYS | | | | |
| | Not dangerous goods | | | | |
| TRANSPORT (| CANADA - ROAD | | | | |
| | Not dangerous goods | | | | |
| TRANSPORT (| CANADA - RAIL | | | | |
| | Not dangerous goods | | | | |
| TRANSPORT (| CANADA - INLAND WATERWAY | 'S | | | |
| | Not dangerous goods | | | | |
| NTERNATION | AL MARITIME DANGEROUS GO | oods | | | |
| | Not dangerous goods | | | | |
| NTERNATION | AL AIR TRANSPORT ASSOCIA | TION - CARGO | | | |
| | Not dangerous goods | | | | |
| NTERNATION | AL AIR TRANSPORT ASSOCIA | TION - PASSEN | NGER | | |
| · · · · · · · · · · · · · · · · · · · | Not dangerous goods | | | | |





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MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect 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

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

SARA Hazard Classification SARA 311/312 Classification

No SARA Hazards

SARA 313 Component(s)

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.

Notification status

| US. Toxic Substances Control Act | y (positive listing) |
|--|----------------------|
| Korea. Toxic Chemical Control Law (TCCL) List | y (positive listing) |
| Australia. Industrial Chemical (Notification and Assessment) Act | y (positive listing) |
| Canada. Canadian Environmental Protection Act (CEPA). Domestic | y (positive listing) |
| Substances List (DSL). (Can. Gaz. Part II, Vol. 133) | - |

| | HMIS | NFPA |
|------------------|------|------|
| Health | 1 | 1 |
| Flammability | 1 | 1 |
| Physical hazards | 0 | |
| Instability | | 0 |
| Specific Hazard | | == |

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 the Solenis Environmental Health and Safety Department.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet:

ACGIH: American Conference of Industrial Hygienists

BEI: Biological Exposure Index

CAS: Chemical Abstracts Service (Division of the American Chemical Society).

CMR: Carcinogenic, Mutagenic or Toxic for Reproduction

FG: Food grade

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization

ICAO-TI (ICAO): Technical Instructions by the "International Civil Aviation Organization"

IMDG: International Maritime Code for Dangerous Goods

ISO: International Organization for Standardization

logPow: octanol-water partition coefficient

LCxx: Lethal Concentration, for xx percent of test population

LDxx: Lethal Dose, for xx percent of test population. ICxx: Inhibitory Concentration for xx of a substance

Ecxx: Effective Concentration of xx N.O.S.: Not Otherwise Specified

OECD: Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit
P-Statement : Precautionary Statement
PBT : Persistent , Bioaccumulative and Toxic

PPE: Personal Protective Equipment STEL: Short-term exposure limit STOT: Specific Target Organ Toxicity

TLV : Threshold Limit Value TWA : Time-weighted average

vPvB: Very Persistent and Very Bioaccumulative

WEL: Workplace Exposure Level

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

DOT: Department of Transportation

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act HMIRC: Hazardous Materials Information Review Commission

HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health OSHA: Occupational Safety and Health Administration

PMRA: Health Canada Pest Management Regulatory Agency





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RTK: Right to Know

WHMIS: Workplace Hazardous Materials Information System

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