

SAFETY DATA SHEET

Revision Date: 11/05/2021

Print Date: 10/28/2023

SDS Number: 000000232988

Version: 1.6

Advantage™ BN3369 Defoaming Agent
™ Trademark, Solenis or its subsidiaries or affiliates,
registered in various countries
825143

SECTION 1. IDENTIFICATION

Product identifier

Trade name : Advantage™ BN3369
Defoaming Agent
™ Trademark, Solenis or its subsidiaries or affiliates,
registered in various countries

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : Industrial chemical

Details of the supplier of the safety data sheet
Solenis Canada ULC
942 Brant St.
Burlington, ON L7R 3X8
Canada

RegulatoryRequestsNA@solenis.com

Emergency telephone number
1-844-SOLENIS (844-765-3647)

Product Information
Contact your local Solenis representative

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

This material is not considered hazardous under WHMIS 2015.

GHS label elements

This material is not considered hazardous under WHMIS 2015.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
TRIETHANOLAMINE	102-71-6	>= 1.5 - < 5

Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

SAFETY DATA SHEET

Revision Date: 11/05/2021

Print Date: 10/28/2023

SDS Number: 000000232988

Version: 1.6

Advantage™ BN3369 Defoaming Agent
 ™ Trademark, Solenis or its subsidiaries or affiliates,
 registered in various countries
 825143

General advice	: No hazards which require special first aid measures.
If inhaled	: If breathed in, move person into fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
In case of eye contact	: Remove contact lenses. Protect unharmed eye.
If swallowed	: Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	: 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)
Notes to physician	: No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray Foam Carbon dioxide (CO2) Dry chemical
Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: Carbon monoxide Carbon dioxide (CO2) formaldehyde Hydrocarbons Silicon oxides silicon dioxide trace amounts of incompletely burned carbon products nitrogen oxides (NOx)
Specific extinguishing methods	: Product is compatible with standard fire-fighting agents.

SAFETY DATA SHEET

Revision Date: 11/05/2021

Print Date: 10/28/2023

SDS Number: 000000232988

Version: 1.6

Advantage™ BN3369 Defoaming Agent
 ™ Trademark, Solenis or its subsidiaries or affiliates,
 registered in various countries
 825143

Further information : Standard procedure for chemical fires.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | |
|---|--|
| Personal precautions, protective equipment and emergency procedures | : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Comply with all applicable federal, state, and local regulations. |
| Environmental precautions | : Prevent further leakage or spillage if safe to do so. |
| Methods and materials for containment and cleaning up | : Keep in suitable, closed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

- | | |
|---|--|
| Advice on protection against fire and explosion | : Normal measures for preventive fire protection. |
| Advice on safe handling | : Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8. |
| Conditions for safe storage | : Electrical installations / working materials must comply with the technological safety standards. |
| Materials to avoid | : No materials to be especially mentioned. |
| Further information on storage stability | : No decomposition if stored and applied as directed. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
TRIETHANOLAMINE	102-71-6	TWA	5 mg/m3	CA AB OEL
		TWA	5 mg/m3	CA BC OEL
		TWA	0.5 ppm 3.1 mg/m3	CA ON OEL
		TWAEV	5 mg/m3	CA QC OEL

SAFETY DATA SHEET

Revision Date: 11/05/2021

Print Date: 10/28/2023

SDS Number: 000000232988

Version: 1.6

Advantage™ BN3369 Defoaming Agent
 ™ Trademark, Solenis or its subsidiaries or affiliates,
 registered in various countries
 825143

Engineering measures

: General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, 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.

Personal protective equipment

Respiratory protection	:	No personal respiratory protective equipment normally required.
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 as appropriate: Safety shoes Wear resistant gloves (consult your safety equipment supplier).
Hygiene measures	:	General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : opaque, white

milky

Odour : characteristic

Odour Threshold : No data available

pH : 8.71

Melting point/freezing point : 0 °C
 Value for Component

Boiling point/boiling range : 100 °C
 Value for Component

Flash point : does not flash

Evaporation rate : similar to water

Flammability (solid, gas) : No data available

SAFETY DATA SHEET

Revision Date: 11/05/2021

Print Date: 10/28/2023

SDS Number: 000000232988

Version: 1.6

Advantage™ BN3369 Defoaming Agent
 ™ Trademark, Solenis or its subsidiaries or affiliates,
 registered in various countries
 825143

Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	similar to water
Relative vapour density	:	< 1 AIR=1
Relative density	:	No data available
Density	:	1.0 g/cm3 (23 °C)
Solubility(ies)		
Water solubility	:	dispersible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	1,900 cps (23 °C) Method: Brookfield 30 RPM
Viscosity, kinematic	:	No data available
Oxidizing properties	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	Stable under recommended storage conditions.
Possibility of hazardous reactions	:	Product will not undergo hazardous polymerization.
Conditions to avoid	:	This product should not be heated above 140 degrees F (60 degrees C) in the presence of aluminum due to excessive corrosion and potential chemical reaction releasing flammable hydrogen gas. excessive heat Exposure to air.

SAFETY DATA SHEET

Revision Date: 11/05/2021

Print Date: 10/28/2023

SDS Number: 000000232988

Version: 1.6

Advantage™ BN3369 Defoaming Agent
™ Trademark, Solenis or its subsidiaries or affiliates,
registered in various countries
825143

Exposure to moisture
Exposure to light.

Incompatible materials	:	Acids Aldehydes aluminum Copper Copper alloys galvanized metals halogenated hydrocarbons Ketones Metals nitrites organic anhydrides organic halides strong alkalis Strong oxidizing agents
Hazardous decomposition products	:	Carbon monoxide Carbon dioxide (CO ₂) Formaldehyde Hydrocarbons Silicon oxides Nitrogen oxides (NO _x) Ammonia

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified based on available information.

Components:**TRIETHANOLAMINE:**

Acute oral toxicity	:	LD50 (Rat): 6,400 mg/kg
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg Method: OECD Test Guideline 402

Skin corrosion/irritation

Not classified based on available information.

Product:

Result : Repeated exposure may cause skin dryness or cracking.

Components:**TRIETHANOLAMINE:**

Result : Mildly irritating to skin

SAFETY DATA SHEET

Revision Date: 11/05/2021

Print Date: 10/28/2023

SDS Number: 000000232988

Version: 1.6

Advantage™ BN3369 Defoaming Agent
™ Trademark, Solenis or its subsidiaries or affiliates,
registered in various countries
825143

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks : Unlikely to cause eye irritation or injury.

Components:**TRIETHANOLAMINE:**

Result : Not irritating to eyes

Respiratory or skin sensitisation**Skin sensitisation**

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:**TRIETHANOLAMINE:**

Test Type : Maximisation Test
Result : Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information**Product:**

Remarks : No data available

SAFETY DATA SHEET

Revision Date: 11/05/2021

Print Date: 10/28/2023

SDS Number: 000000232988

Version: 1.6

Advantage™ BN3369 Defoaming Agent
™ Trademark, Solenis or its subsidiaries or affiliates,
registered in various countries
825143

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****TRIETHANOLAMINE:**

- Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 11,800 mg/l
Exposure time: 96 h
Test Type: flow-through test
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Water flea (Ceriodaphnia dubia)): 609.88 mg/l
Exposure time: 48 h
Test Type: static test
- EC50 (Daphnia magna (Water flea)): 2,038 mg/l
Exposure time: 24 h
Test Type: static test
- Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 216 - 512 mg/l
Exposure time: 72 h
Test Type: Growth inhibition

Persistence and degradability**Components:****TRIETHANOLAMINE:**

- Biodegradability : Result: Readily biodegradable.
Biodegradation: 97 %
Exposure time: 28 d

Bioaccumulative potential**Components:****TRIETHANOLAMINE:**

- Partition coefficient: n-octanol/water : log Pow: -1.00

Mobility in soil

No data available

Other adverse effects**Product:**

- Additional ecological information : No data available

SAFETY DATA SHEET

Revision Date: 11/05/2021

Print Date: 10/28/2023

SDS Number: 000000232988

Version: 1.6

Advantage™ BN3369 Defoaming Agent
 ™ Trademark, Solenis or its subsidiaries or affiliates,
 registered in various countries
 825143

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

- | | |
|------------------------|--|
| Waste from residues | : Dispose of in accordance with all applicable local, state and federal regulations. |
| Contaminated packaging | : Empty remaining contents. |

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

TDG

Not regulated as a dangerous good

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

The components of this product are reported in the following inventories:

- | | |
|-------|--|
| TCSI | : Not in compliance with the inventory |
| TSCA | : All substances listed as active on the TSCA inventory |
| AIIC | : On the inventory, or in compliance with the inventory |
| DSL | : All components of this product are on the Canadian DSL |
| ENCS | : On the inventory, or in compliance with the inventory |
| KECI | : On the inventory, or in compliance with the inventory |
| PICCS | : On the inventory, or in compliance with the inventory |
| IECSC | : On the inventory, or in compliance with the inventory |

SAFETY DATA SHEET

Revision Date: 11/05/2021

Print Date: 10/28/2023

SDS Number: 000000232988

Version: 1.6

Advantage™ BN3369 Defoaming Agent
 ™ Trademark, Solenis or its subsidiaries or affiliates,
 registered in various countries
 825143

NZIOC : On the inventory, or in compliance with the inventory

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Further information

Revision Date : 11/05/2021

Full text of other abbreviations

CA AB OEL	: Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	: Canada. British Columbia OEL
CA ON OEL	: Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
CA QC OEL	: Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
CA AB OEL / TWA	: 8-hour Occupational exposure limit
CA BC OEL / TWA	: 8-hour time weighted average
CA ON OEL / TWA	: Time-Weighted Average Limit (TWA)
CA QC OEL / TWAEV	: Time-weighted average exposure value

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the

SAFETY DATA SHEET

Revision Date: 11/05/2021

Print Date: 10/28/2023

SDS Number: 000000232988

Version: 1.6

Advantage™ BN3369 Defoaming Agent
™ Trademark, Solenis or its subsidiaries or affiliates,
registered in various countries
825143

Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals;
SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan
Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic
Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations
Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very
Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Sources of key data used to compile the Safety Data Sheet

Key literature references and sources of data

SOLENIS Internal data

SOLENIS internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for
labelling (GHS) and transport.

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. This SDS has been prepared by
the Solenis Environmental Health and Safety Department.

CA / EN