

## 1. Identification

**Product identifier** Brandt AquaSurf

**Other means of identification** Not available.

**Recommended use** Refer to product label

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** Brandt Consolidated, Inc.

**Address** 2935 South Koke Mill Road  
Springfield, IL 62711 US  
US

**Telephone** 1-217-547-5800

**Website** www.brandt.co

**E-mail** msds@brandt.co

**Contact person** EH&S / Regulatory Department

**Emergency phone number** CHEMTREC (24 hours): 1-800-424-3900

## 2. Hazard(s) identification

**Physical hazards** Flammable liquids Category 4

**Health hazards** Skin corrosion/irritation Not classified

Serious eye damage/eye irritation Not classified

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** Warning

**Hazard statement** Combustible liquid.

**Precautionary statement**

**Prevention** Keep away from flames and hot surfaces-No smoking. Wear protective gloves/eye protection/face protection.

**Response** In case of fire: Use appropriate media to extinguish.

**Storage** Store in a well-ventilated place. Keep cool.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

**Supplemental information** Not applicable.

## 3. Composition/information on ingredients

### Mixtures

Hazardous components			
Chemical name	Common name and synonyms	CAS number	%
n-Butanol		71-36-3	5 - < 10
Propylene glycol		57-55-6	3 - < 5
Other components below reportable levels			90 - 100

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	By heating and fire, harmful vapors/gases may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. In the event of fire and/or explosion do not breathe fumes.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep out of low areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the MSDS.
<b>Methods and materials for containment and cleaning up</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Extinguish all flames in the vicinity. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Stop the flow of material, if this is without risk.  Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills in original containers for re-use. For waste disposal, see section 13 of the MSDS.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep away from heat, sparks and open flame. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the MSDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
n-Butanol (CAS 71-36-3)	PEL	300 mg/m <sup>3</sup> 100 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value
n-Butanol (CAS 71-36-3)	TWA	20 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
n-Butanol (CAS 71-36-3)	Ceiling	150 mg/m <sup>3</sup> 50 ppm

**US. AIHA Workplace Environmental Exposure Level (WEEL) Guides**

Components	Type	Value	Form
Propylene glycol (CAS 57-55-6)	TWA	10 mg/m <sup>3</sup>	Aerosol.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Exposure guidelines****US - California OELs: Skin designation**

n-Butanol (CAS 71-36-3) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

n-Butanol (CAS 71-36-3) Skin designation applies.

**US - Tennessee OELs: Skin designation**

n-Butanol (CAS 71-36-3) Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

n-Butanol (CAS 71-36-3) Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear eye/face protection. Chemical goggles are recommended. Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection** Wear protective gloves.

**Other** Wear appropriate chemical resistant clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance**

**Physical state** Liquid.

**Form** Liquid.

**Color** Orange.

**Odor** Soapy

**Odor threshold** Not available.

**pH** Not available.

**Salt-Out / Crystallization Temp** Not available.

**Melting point/freezing point** -129.64 °F (-89.8 °C) estimated

**Initial boiling point and boiling range** > 200 °F (> 93.33 °C)

**Flash point** 165.20 °F (74.00 °C) Pensky-Martens Closed Cup

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not available.

**Upper/lower flammability or explosive limits**

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** 3.03 hPa estimated

**Vapor density** Not available.

**Relative density** 1.04 g/cm<sup>3</sup> Typical

<b>Solubility(ies)</b>	Emulsifies
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	650 °F (343.33 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Flammability class</b>	Combustible IIIA estimated
<b>Percent volatile</b>	20.04 % estimated
<b>pH in aqueous solution</b>	6.5 (1% Solution)
<b>Pounds per gallon</b>	8.7 lb/gal
<b>VOC (Weight %)</b>	9.98 % estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks. Avoid temperatures exceeding the flash point.
<b>Incompatible materials</b>	Alkaline metals. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not available.
<b>Inhalation</b>	Prolonged inhalation may be harmful. Due to lack of data the classification is not possible.
<b>Skin contact</b>	Due to lack of data the classification is not possible.
<b>Eye contact</b>	Based on available data, the classification criteria are not met.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

#### Acute toxicity

Product	Species	Test Results
Brandt AquaSurf (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 2000
<i>Oral</i>		
LD50	Rat	> 2000
<b>Components</b>		
n-Butanol (CAS 71-36-3)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	3400 mg/kg
<i>Inhalation</i>		
LC50	Rat	8000 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	790 mg/kg
<i>Other</i>		
LD50	Mouse	377 mg/kg
	Rat	310 mg/kg

Components	Species	Test Results
Propylene glycol (CAS 57-55-6)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Dog	19 g/kg
	Guinea pig	18.4 g/kg
	Mouse	23.9 g/kg
	Rabbit	18 g/kg
	Rat	30 g/kg
<i>Other</i>		
LD50	Mouse	6630 mg/kg
		17.3 g/kg
	Rat	6423 mg/kg
		14 g/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Corneal opacity value</b>	4.0000
<b>Conjunctival reddening value</b>	2.0000
<b>Recover days</b>	3
<b>Respiratory sensitization</b>	Due to lack of data the classification is not possible.
<b>Skin sensitization</b>	Due to lack of data the classification is not possible.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Due to lack of data the classification is not possible.
<b>Reproductive toxicity</b>	Due to lack of data the classification is not possible.
<b>Specific target organ toxicity - single exposure</b>	Due to lack of data the classification is not possible.
<b>Specific target organ toxicity - repeated exposure</b>	Due to lack of data the classification is not possible.
<b>Aspiration hazard</b>	Due to lack of data the classification is not possible.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species	Test Results
Brandt AquaSurf (CAS Mixture)		
<i>Acute</i>		
Crustacea	EC50	Daphnia
		> 100 mg/l, 48 hr
Other	LC50	Rainbow Trout
		> 100 mg/l, 96 hr
Components	Species	Test Results
n-Butanol (CAS 71-36-3)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna)
		1897 - 2072 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)
		100 - 500 mg/l, 96 hours
Propylene glycol (CAS 57-55-6)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna)
		> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)
		710 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

<b>Bioaccumulative potential</b>	Not available.
<b>Partition coefficient n-octanol / water (log Kow)</b>	
n-Butanol	0.88
Propylene glycol	-0.92
<b>Mobility in soil</b>	Not available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>US RCRA Hazardous Waste U List: Reference</b>	
n-Butanol (CAS 71-36-3)	U031
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

#### DOT

##### Air

##### Basic shipping requirements:

<b>UN number</b>	UN1993
<b>Proper shipping name</b>	Flammable liquid, n.o.s.
<b>Hazard class</b>	3
<b>Packing group</b>	III
<b>Special precautions</b>	Read safety instructions, SDS and emergency procedures before handling.

#### DOT

##### Inland waterway

##### Basic shipping requirements:

<b>UN number</b>	UN1993
<b>Proper shipping name</b>	Flammable Liquid, n.o.s.
<b>Hazard class</b>	3
<b>Special precautions</b>	Read safety instructions, SDS and emergency procedures before handling.

#### DOT

##### Maritime

##### Basic shipping requirements:

<b>UN number</b>	UN1993
<b>Proper shipping name</b>	Flammable Liquid, n.o.s.
<b>Hazard class</b>	3
<b>Packing group</b>	III
<b>Special precautions</b>	Read safety instructions, SDS and emergency procedures before handling.



## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

n-Butanol (CAS 71-36-3) LISTED

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
 Delayed Hazard - Yes  
 Fire Hazard - Yes  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Not listed.

**Food and Drug Administration (FDA)** Not regulated.

**US state regulations**

**US. Massachusetts RTK - Substance List**

n-Butanol (CAS 71-36-3)

**US. New Jersey Worker and Community Right-to-Know Act**

n-Butanol (CAS 71-36-3) 500 lbs

**US. Pennsylvania RTK - Hazardous Substances**

n-Butanol (CAS 71-36-3)  
 Propylene glycol (CAS 57-55-6)

**US. Rhode Island RTK**

n-Butanol (CAS 71-36-3)

**US. California Proposition 65**

Not Listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 04-29-2013

**Revision date** 05-07-2013

**Version #** 02

**Further information** Not available.

**Disclaimer** While the information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or information set forth, or that the products, or information may be used without infringing the intellectual property rights of others. In no case shall the information provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the information furnished by our company hereunder are given gratis and we assume no obligation or liability for the information given or results obtained, all such being given and accepted at your risk.

**Revision Information** Product and Company Identification: Product and Company Identification  
Physical & Chemical Properties: Multiple Properties  
Toxicological Information: Toxicological Property Data  
Transport Information: Agency Name, Packaging Type, and Transport Mode Selection  
Material Attributes & Uses; Experimental Data: Experimental Data