Safety Data Sheet

Section 1: Identification

Product Identifier

Detergent

Product Name

Trade Name: SPLASH De-Bug +32^{o}F

PN (Part number): 129377

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

-Material for industrial applications

-Industrial and professional use

-Consumer end use

Details of the supplier of the safety data sheet

Manufacturer

SPLASH Products

51 E. Maryland Ave.

St. Paul, MN 55117

Phone: (651) 489-8211

Emergency telephone number

1-800-535-5053

Section 2: Hazard(s) Identification

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

Acute toxicity, Oral Category 5

Acute toxicity, Inhalation Category 5

Acute toxicity, Dermal Category 5

Serious eye damage/eye irritation, Mild Irritant Category 2B

GHS label elements

Hazard pictograms

No Pictogram

Signal word-WARNING

2-butoxyethanol

Hazard statements

May be harmful if swallowed

May be harmful if inhaled

May be harmful in contact with skin

Causes eye irritation

Precautionary statements

Prevention

Do not breathe mist.

Wear protective gloves/protective clothing/eye protection/face protection.

Take off contaminated clothing and wash before use

Store away from heat and ignition sources

Keep away from oxidizing materials and strong acids

Response

IF SWALLOWED: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

IF ON SKIN (or hair): Wash with soap and water. Get medical attention if irritation develops. Cold water may be used.

IF IN EYES: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 30 minutes. Cold water may be used. Get medical attention immediately.

IF EXPOSED or CONCERNED:

Immediately call a POISON CENTER or a doctor/physician.

Storage

Store in a well-ventilated place.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified

Product is stable.

Section 3: Composition/Information on Ingredients

Substance/mixture: Mixture

Chemical name: 2-butoxyethanol

Other means of identification: No

CAS number/other identifiers

Ingredient name	%	CAS number
2-butoxyethanol	1	111-76-2

Section 4: First Aid Measurements

Description of necessary first aid measures

Eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 30 minutes. Cold water may be used. Get medical attention immediately.

Inhalation: Bring accident victims out into the fresh air. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately in severe cases or if recovery is not rapid.

Skin contact: After contact with skin, wash immediately with plenty of water. Remove contaminated clothing and wash before reuse.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

May cause irritation and redness to eyes and mucous membranes.

Inhalation

May cause irritation to mucous membranes.

Skin contact

May cause irritation and redness.

Ingestion

May cause irritation and redness to mucous membranes.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

Exposure may aggravate acute or chronic asthma, emphysema and bronchitis.

Specific treatments

N/A

Protection of first-aiders

N/A

See toxicological information (Section 11)

Section 5: Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

SMALL FIRE: Use DRY chemical powder, CO_2 or appropriate foam.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Unsuitable extinguishing media

None known

Specific hazards arising from the chemical

Forms of peroxides of unknown stability.

Hazardous thermal decomposition products/Products of combustion

Products of combustion are carbon oxides (CO, CO_2).

Special protective actions for fire fighters

Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Eliminate sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Environmental precautions

Methods and materials for containment and cleaning up:

Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including: the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

Section 7: Handling and Storage

Precautions for safe handling

Protective measures, advice on general occupational hygiene and conditions for safe storage, including any incompatibilities:

Keep container tightly closed and in a well-ventilated place. Store away from heat and light.

Avoid breathing mists or vapors. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. Minimize exposure to air. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. Do not allow to evaporate to near dryness. Do not distill to near dryness. Addition of water or appropriate reducing materials will lessen peroxide formation.

Section 8: Exposure Controls/Personal Protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits			
2-butoxyethanol	ACGIH		OSHA	
	(TWA)	(STEL)	(PEL)	(STEL)
	20 ppm	N/A	50 ppm; 240 mg/m^3	N/A

Appropriate engineering controls and Environmental exposure controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Individual protection measures

Hygiene measures

Observe good industrial hygiene practices.

Eye/face protection: Use chemical safety goggles.

Skin protection

Hand protection and Body protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Other skin protection

Wash hands and other exposed areas with mild soap and water before eating or drinking.

Respiratory protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Respirator Type(s) (NIOSH Approved): If the exposure limit is exceeded and engineering controls are not feasible, a half face piece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full face piece particulate respirator (NIOSH type N100 filter) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, Glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full face piece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in Oxygen-deficient atmospheres.

Section 9: Physical and Chemical Properties

Appearance

Physical state: Green liquid

Odor: Faint, sweet odor

Odor threshold: Not determined

pH: 8.0

Specific Gravity: 0.998

Melting point: $0^{o}C$

Boiling point: $98^{o}C$

Flash point: $>94^{o}C$

Evaporation rate (BuAc=1): Not determined

Flammability (solid, gas): No

Lower and upper explosive (flammable) limits: LEL 1.1%, UEL 10% (2-butoxyethanol)

Vapor pressure: Not determined

Vapor density (Air=1): Not determined

Solubility: Soluble in water

Partition coefficient: n-octanol/water: Not Established

Auto-ignition temperature: Not Applicable

Decomposition temperature: Not Established

Viscosity: Not determined

VOC%: 1.0

Section 10: Stability and Reactivity

Reactivity

Stable under recommended storage conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Forms peroxides of unknown stability.

Conditions to avoid

Temperatures above the flash point and avoid excessive heat, open flame or other sources of ignition.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon Dioxide. Carbon Monoxide.

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Test	Results
2-butoxyethanol	Acute toxicity, oral (male rat)	LD50 = 1,300 mg/kg
	Acute toxicity, dermal	LD50 = >2000 mg/kg
	Acute toxicity, inhalation (rat, 3h)	LC50 = >4.9 mg/l

Summary Comments:

Sensitization

Product/ingredient name	Test	Results	Basis
2-butoxyethanol		No evidence of sensitization effect	

Summary Comments:

Carcinogenicity

Product/ingredient name	Test	Results	Basis
2-butoxyethanol	Based on available data the classification criteria are not met. Not classified as hazardous.		

Summary Comments:

Specific target organ toxicity (single exposure)

Product/ingredient name	Test	Results	Basis
2-butoxyethanol		Not classified.	

Summary Comments:

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Test	Results	Basis
2-butoxyethanol		Not classified.	

Summary Comments:

Aspiration hazard

Product/ingredient name	Test	Results	Basis
2-butoxyethanol	Human exposure studies	Tolerance at 200 ppm/40 hours	

Summary Comments:

Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Information on the likely routes of exposure

Potential acute health effects

Eye contact: Irritating to the eyes.

Inhalation: None known.

Skin contact: Causes skin irritation.

Ingestion: Harmful if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Eye irritation.

Inhalation: Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Skin contact: Skin irritation.

Ingestion: May irritate the gastrointestinal tract, cause nausea, and vomiting.

Potential chronic health effects (2-butoxyethanol)

Carcinogenicity: No known carcinogens.

Mutagenicity: No data available.

Teratogenicity: No data available.

Developmental effects: No data available.

Fertility effects: No data available.

Numerical measures of toxicity

Acute toxicity estimates

Section 12: Ecological Information

Toxicity

Acute Fish toxicity: (2-butoxyethanol)

LC50 - Oncorhynchus mykiss (rainbow trout) – 1,474 mg/l - 96 h

Chronic Fish toxicity: (2-butoxyethanol)

NOEC (Zebra Fish, 21 d): > 100 mg/l

Acute toxicity for invertebrates: (2-butoxyethanol)

EC50 - Daphnia magna (Water flea) – 1,550 mg/l - 48 h

Chronic toxicity for invertebrates: (2-butoxyethanol)

NOEC (daphnid, 21 d): 100 mg/l

Acute toxicity for aquatic plants: (2-butoxyethanol)

EC-50 (Algae (Pseudokirchneriella subcapitata), 72 h): 1,840 mg/l

Acute bacterial toxicity: (2-butoxyethanol)

No data available.

Persistence and degradability

Biodegradability: (2-butoxyethanol)

90.4 % (28 d) Readily biodegradable

Stability in water: (2-butoxyethanol)

Biological Oxygen Demand: No data available

Chemical Oxygen Demand: No data available

Photodegradation: (2-butoxyethanol)

No data available

Volatility (Henry's Law constant): (2-butoxyethanol)

Partition coefficient n-octanol/water (log K_{ow}) = No data available

Bioaccumulative potential

Bioaccumulation: (2-butoxyethanol)

Potential to bioaccumulate is low.

Bioconcentration factor (BCF): No data available.

Mobility in soil: (2-butoxyethanol)

Distribution among environmental compartments:

Expected to partition to water.

Other adverse effects:

No data available.

Section 13: Disposal Considerations

Disposal methods

Dispose in accordance with applicable international, national and local laws, ordinances and statutes.

Section 14: Transport Information

UN Number: N/A
DOT Proper Shipping Name: Not Regulated
Exemptions: N/A
Transport hazard Class(es): N/A
Packing Group: N/A

Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)
Transport Hazard Class(es): N/A

Maritime Transport IMDG/GGVSea
Transport Hazard Class(es): N/A

Marine Pollutant: No

Air Transport ICAO-TI and IATA-DGR

Transport Hazard Class(es): N/A

Section 15: Regulatory Information

Chemical Inventory Status-Part 1

Ingredient (CAS#)	TSCA	EC	Japan	Australia
2-butoxyethanol (111-76-2)	Yes	Yes	Yes	Yes

Chemical Inventory Status-Part 2

Ingredient (CAS#)	Korea	Canada	Canada	Philippines
		DSL	NDSL	
2-butoxyethanol (111-76-2)	Yes	Yes	No	Yes

Federal, State & International Regulations-Part 1

	SARA 302		SARA 313	
Ingredient (CAS#)	RQ	TPQ	List Chemical	Category
2-butoxyethanol (111-76-2)	No	No	Yes	No

Federal, State & International Regulations-Part 2

	RCRA		TSCA
Ingredient (CAS#)	CERCLA	261.33	8(d)
2-butoxyethanol (111-76-2)	No	No	No

Chemical Weapons Convention: No

TSCA 12b: No

CDTA: No

SARA 311/312:

Acute: Yes, Chronic: Yes, Fire: Yes, Pressure: No, Reactivity: No

Mixture/Liquid

Australian Hazchem Code: 2[S]

Poison Schedule: No information found

Section 16: Other Information

History

Date of issue: 04/10/15

Version: 1a

Revised Sections(s): New

Prepared by: Andrew Gioino, SPLASH PRODUCTS

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.