

SAFETY DATA SHEET

Revision date: 3/31/2017

Supersedes: Not applicable

Version: 1

1. Identification

Product Identifier

Product name: The Duke [Ducan Blue Degreaser – G2]

Intended use of the product

Use of the substance/mixture: Household cleaning – consumer product

Details of the supplier of the safety data sheet

Ducan Industries Ltd.
1920 Broadway Street,
Port Coquitlam, BC Canada, V3C 2N1
Emergency Telephone: (604) 942-0722

2. Hazard Identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standards (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

GHS label elements including precautionary statements

Emergency Overview



Signal word

Warning

Hazard statements

Causes skin irritation
Causes eye irritation

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Appearance	Clear, blue	Physical State	Liquid	Odor	Faint Solvent
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Precautionary statements – Prevention

Wash hands and any exposed skin thoroughly after handling.

Wear eye protection/face protection such as safety glasses.

Precautionary statements – Response

Eyes

IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists. Get medical advice/attention.

Skin

If skin irritation occurs, get medical advice/attention.

Precautionary statement – Storage

None.

Precautionary statement – Disposal

Contains chlorine bleach and caustic soda.

Hazards not otherwise classified (HNOC)

The following medical conditions may be aggravated by exposure to high concentrations of vapor or mist: heart conditions or chronic respiratory problems such as asthma, emphysema or obstructive lung disease.

Unknown toxicity

None known.

Other information

None Known.

Interaction with other chemicals

Reacts with other household chemicals such as products containing hydrochloric acid to produce hazardous gases, such as chlorine.

3. Composition/Information on ingredients

Chemical Name	CAS No.	Wt %	GHS-US classification
Water	7732-18-5	85 - 95	
Sodium carbonate	497-19-8	1.0 – 5.0	
Butoxy ethanol	111-76-2	1.0 – 5.0	
Fatty alcohol ethoxylates	9016-45-9	1.0 – 5.0	

4. First Aid Measures

First Aid Measures

General Advice	Show this safety data sheet to the doctor in attendance.
Inhalation	If symptoms of exposure develop, remove to fresh air. Seek medical attention if symptoms persist.
Skin Contact	Remove contaminated clothing. Wash all affected and exposed areas with soap and water. If irritation or redness persists, seek medical attention.
Eye Contactt	Expose eyes should be immediately flushed with copious amounts of water using a steady stream for a minimum of 15 minutes. Do not rub affected area. If irritation, pain, swelling or tearing persistent, seek medical attention.
Ingestion	If swallowed, get medical attention by call in Poison Control Center or hospital immediately. Have person sip a glassful of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor.
Protection of first-aiders	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Most important Symptoms Stinging and irritation of eyes.

& Effects

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. Firefighting Measures

Suitable Extinguishing Media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Alcohol foam, carbon dioxide, dry chemicals and water fog.

Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

Container may melt and leak in heat of fire.

Although this product has a flash point below 200°F, it is an aqueous solution containing an alcohol and does not sustain combustion. Standard procedure for chemical fires. Wear full protective clothing and positive pressure self-contained breathing apparatus.

Explosive Data

Sensitivity to Mechanical Impact: None.

Sensitivity to Static Discharge: None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedure

Personal Precautions Remove all sources of ignition. Avoid contact with eyes, skin and clothing. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8

Environmental Precautions

Environmental Precautions See Section 12 for ecological information

Methods and Material for Containment and Cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material. Dike large spills.

7. Handling & Storage

Precautions for Safe Handling

Handling **KEEP OUT OF REACH OF CHILDREN AND PETS.** Use only as directed. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Keep away from heat and sources of ignition.

Conditions for Safe Storage, Including any Incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Do not freeze.

Incompatible Products Stable under normal conditions.

8. Exposure Controls / Personal Protection

Control Parameters

Exposure Guidelines:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
butoxyethanol 111-76-2	25 ppm	20 ppm	20 ppm

ACGIH TLV: American Conference of Governmental Industrial Hygienists – Threshold Limit Value.

OSHA PEL: Occupational Safety and Health Administration – Permissible Exposure Limits

NIOSH IDLH: National Institute of Occupational Safety and Health - Immediately Dangerous to Life or Health.

Appropriate Engineering Controls

Engineering Measures Showers, eyewash stations, ventilation systems

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection: If splashes are likely to occur: Wear safety glasses with side shields (or goggles). None required for consumer use.

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced. NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measure Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Use only with adequate ventilation.

9. Physical & Chemical Properties

Physical and Chemical Properties

Physical States	Liquid		
Appearance	Clear	Odor	Faint solvent
Color	Blue	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/Methods</u>
pH	11.0 – 12.9	None known
Melting/freezing point	Non data available	None known
Boiling point/boiling range	Non data available	None known
Flash point	100°C	ASTM D56
Evaporation rate	Non data available	None known
Flammability (solid, gas)	Non data available	None known
Flammability limits in Air		
Upper flammability limit	Non data available	None known
Lower flammability limit	Non data available	None known
Vapor pressure	Non data available	None known
Vapor density	Non data available	None known
Specific Gravity	1.025	None known
Water solubility	soluble in water	None known
Solubility in other solvents	Non data available	None known
Partition coefficient: n-octanol/water	Non data available	None known
Autoignition temperature	Non data available	None known
Decomposition temperature	Non data available	None known
Kinematic viscosity	Non data available	None known
Dynamic viscosity	Non data available	None known
Explosive properties	Not explosive	None known
Oxidizing properties	Non data available	None known
 Other information		
Softening point	Non data available	None known

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VOC content (%)	< 3%	None known
Particle size	Non data available	None known
Particle size distribution	Non data available	None known

10. Stability & Reactivity

Reactivity

Reacts with other household chemicals such as products containing hydrochloric acid to produce hazardous gases, such as chloramines.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reaction

None under normal processing.

Conditions to Avoid

None known based on information supplied.

Incompatible Materials

Products containing chlorine bleach.

Hazardous Decomposition Products

None know based on information supplied.

11. Toxicological Information

Information on likely routes of exposure

Product information

Inhalation Exposure to vapor or mist may irritate respiratory tract.

Eye Contact May cause eye irritation.

Ingestion Ingestion may cause irritation to mucous membranes and gastrointestinal tract, nausea, vomiting and diarrhea.

Component Information

Chemical Name	LD₅₀ Oral	LD₅₀ Dermal	LC₅₀ Inhalation
Butoxyethanol 111-76-0	560 mg/kg (rat)	400 mg/kg (rabbit)	450 ppm (4 hours, rat)
		-	-

Information on toxicological effects

Symptoms May cause redness and tearing of the eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
	-	-	-	-

IARC (International Agency for Research on Cancer)

Group 3 – Not Classifiable as to Carcinogenicity in Humans)

Reproductive Toxicity

STOT – single exposure No information available.

STOT – repeated exposure No information available.

Chronic Toxicity No information available.

Target Organ Effects No information available.

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Aspiration hazard No information available.

Numerical measures of toxicity – Product Information

The following values are calculated based on chapter 3.1 of the GHS document Not applicable

12. Ecological Information

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Persistence and Degradability No information available.

Bioaccumulation No information available.

Other adverse effects No information available.

13. Disposal Considerations

Disposal methods

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

Contaminated packaging

Do not reuse empty containers. Dispose of in accordance with all applicable federal, state and local regulations.

14. Transportation Information

Land transport

US DOT & Canada TDG surface transportation

UN-Number	UN 1760
Hazard Class	Class 8
Packaging Group	III
Description	Corrosive Liquid, N.O.S. (Sodium hydroxide, solution)

Sea Transport

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IMDG / IMO

UN-Number	UN 1760
Packaging group	III
Proper shipping names	Corrosive Liquid, N.O.S. (Sodium hydroxide, solution)
Class	Class 8
EMs No.	None
Marine Pollutant	None

Air transport

ICAO / IATA

UN-Number	UN 1760
Proper shipping name	Corrosive Liquid, N.O.S. (Sodium hydroxide, solution)
Hazard Class	None
Packaging Group	III

15. Regulatory Information

Chemical Inventories

TSCA All components of this product are either on the US TSCA Inventory or otherwise exempt from listing.

DSL/NDSL All components are on the DSO or NDSL.

TSCA – United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

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SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substance which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ

EPA Statement

Not applicable.

US State Regulations

California Proposition 65

This product does not contain any chemicals to State of California to cause cancer, birth defects or any other reproductive harm.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois

International Regulations

Canada

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class Class E (corrosive)

16. Other Information

NFPA

Health Hazard 1 Flammability 0 Instability 0 Physical & Chemical Hazard 2

HMIS

Health Hazard 1 Flammability 0 Physical Hazards 2 Personal Protection B

Prepared by

Ducan Industries Ltd.
1920 Broadway Street,
Port Coquitlam, BC Canada, V3C 2N1

Revision Date New

Revision Note New

General Disclaimer

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 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.

End of Safety Data Sheet