

# **Safety Data Sheet**

Issue Date: 09-Apr-2018 Revision Date: 12-Apr-2018 Version 1

## 1. IDENTIFICATION

**Product Identifier** 

Product Name BlueDevil Complete Fuel System Cleaner

Other means of identification

SDS # BLUEDEVIL-006

UN/ID No UN1993

Recommended use of the chemical and restrictions on use

**Recommended Use** For industrial use.

Details of the supplier of the safety data sheet

Supplier Address

BlueDevil Products 854 Lowcountry Blvd. Suite 101 Mt. Pleasant, SC 29464 888-863-0426

**Emergency Telephone Number** 

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

Appearance Colorless liquid Physical state Liquid Odor Ketone

## Classification

Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Germ cell mutagenicity	Category 1A
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable Liquids	Category 2

## Signal Word Danger

#### **Hazard statements**

Harmful in contact with skin Harmful if inhaled Causes skin irritation Causes serious eye irritation May cause genetic defects

May cause cancer

May cause damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Highly flammable liquid and vapor



#### **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

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

Use only outdoors or in a well-ventilated area

Wash face, hands and any exposed skin thoroughly after handling

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof equipment

Use only non-sparking tools

Take precautionary measures against static discharge

#### **Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

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If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

Call a POISON CENTER or doctor if you feel unwell

If skin irritation occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a poison center or doctor/physician if you feel unwell

IF SWALLOWED: Immediately call a POISON CENTER or doctor

Do NOT induce vomiting

IN CASE OF FIRE: Use CO2, dry chemical, or foam to extinguish

# **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Keep cool

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Other hazards

Very toxic to aquatic life with long lasting effects

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Xylenes (o-, m-, p- isomers)	1330-20-7	45-50
Isopropyl Alcohol	67-63-0	15-20
Acetone	67-64-1	15-20
Ethylbenzene	100-41-4	10-15
Petroleum Distillate	64741-65-7	1-5

<sup>\*\*</sup>If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

## 4. FIRST AID MEASURES

#### **First Aid Measures**

**General Advice** Provide this SDS to medical personnel for treatment.

Eye Contact 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 Contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. Call a poison center or doctor/physician if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

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Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. Call a poison center or doctor/physician if you feel unwell.

Ingestion IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT

induce vomiting.

## Most important symptoms and effects

Symptoms May be harmful if swallowed. Harmful if inhaled. Causes skin irritation. Causes serious eye

irritation. May cause damage to organs through prolonged or repeated exposure. May be

fatal if swallowed and enters airways.

#### Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

## Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray (fog). Foam. Carbon dioxide (CO2). Dry chemical powder. Carbon dioxide (CO2). Sand/earth.

Unsuitable Extinguishing Media Do not use water jet as an extinguisher, as this will spread the fire.

## **Specific Hazards Arising from the Chemical**

Highly flammable liquid and vapor. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products Smoke, fumes or vapors, and oxides of carbon.

Sensitivity to Static Discharge

This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminates.

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## 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 procedures

Personal Precautions Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use

personal protective equipment as required. Remove all sources of ignition. Avoid contact

with skin, eyes or clothing.

**Environmental precautions** 

**Environmental precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See

Section 12, 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 Clean-Up Small Spills: Absorb with earth, sand or other non-combustible material and transfer to

containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading, absorb in vermiculite, dry sand or earth and place into

containers. following product recovery, flush area with water.

## 7. HANDLING AND STORAGE

## Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Obtain special

instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing and eye/face protection. Use only outdoors or in a well-ventilated area. Wash face, hands and any exposed skin thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion proof equipment. Use only

non-sparking tools. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked

up. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights,

electric motors and static electricity).

**Incompatible Materials** Strong acids. Strong oxidizing agents. Halogens.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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#### **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Xylenes (o-, m-, p- isomers)	STEL: 150 ppm	TWA: 100 ppm	-
1330-20-7	TWA: 100 ppm	TWA: 435 mg/m <sup>3</sup>	
		(vacated) TWA: 100 ppm	
		(vacated) TWA: 435 mg/m <sup>3</sup>	
		(vacated) STEL: 150 ppm	
		(vacated) STEL: 655 mg/m <sup>3</sup>	
Isopropyl Alcohol	STEL: 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm
67-63-0	TWA: 200 ppm	TWA: 980 mg/m <sup>3</sup>	TWA: 400 ppm
		(vacated) TWA: 400 ppm	TWA: 980 mg/m <sup>3</sup>
		(vacated) TWA: 980 mg/m <sup>3</sup>	STEL: 500 ppm ੂ
		(vacated) STEL: 500 ppm <sup>2</sup>	STEL: 1225 mg/m <sup>3</sup>
		(vacated) STEL: 1225 mg/m <sup>3</sup>	
Acetone	STEL: 500 ppm	TWA: 1000 ppm	IDLH: 2500 ppm
67-64-1	TWA: 250 ppm	TWA: 2400 mg/m <sup>3</sup>	TWA: 250 ppm
		(vacated) TWA: 750 ppm	TWA: 590 mg/m <sup>3</sup>
		(vacated) TWA: 1800 mg/m <sup>3</sup>	
		(vacated) STEL: 2400 mg/m <sup>3</sup>	
		The acetone STEL does not apply	
		to the cellulose acetate fiber	
		industry. It is in effect for all other	
		sectors.	
		(vacated) STEL: 1000 ppm	
Ethylbenzene	TWA: 20 ppm	TWA: 100 ppm	IDLH: 800 ppm
100-41-4		TWA: 435 mg/m <sup>3</sup>	TWA: 100 ppm
		(vacated) TWA: 100 ppm	TWA: 435 mg/m <sup>3</sup>
		(vacated) TWA: 435 mg/m <sup>3</sup>	STEL: 125 ppm
		(vacated) STEL: 125 ppm	STEL: 545 mg/m <sup>3</sup>
		(vacated) STEL: 545 mg/m <sup>3</sup>	

#### Appropriate engineering controls

**Engineering Controls** Explosion-proof general and local exhaust ventilation. Showers. Eyewash stations.

## Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Wear eye/face protection. Refer to 29 CFR 1910.133 for eye and face protection

regulations.

**Skin and Body Protection**Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate

skin and body protection.

Respiratory Protection Chemical respirator with organic vapor cartridge and full facepiece. Refer to 29 CFR

1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Physical state Liquid

AppearanceColorless liquidOdorKetone

Color Colorless Odor Threshold Not determined

Property Values Remarks • Method

pH Not determined Melting point / freezing point -94.9 °C / 138.82 °F

Boiling Point / Boiling Range
Flash Point
Evaporation Rate
Flammability (Solid, Gas)

136.1 °C / 276.98 °F
18.3 °C / 65 °F
Not determined
Liquid - Not Applicable

Flammability Limit in Air

Upper Flammability Limit 6.8%
Lower Flammability Limit 1.2%
Vapor Pressure 11.08 hPa
Vapor Density Not determined

Relative Density 0.84

Water Solubility Not determined Solubility in other solvents Not determined **Partition Coefficient** Not determined **Autoignition temperature** 432.22°C / 810°F **Decomposition Temperature** Not determined Kinematic Viscosity Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

**Other Information** 

 VOC Content
 59.5%

 Density
 6.97 lbs/gal

## 10. STABILITY AND REACTIVITY

#### Reactivity

Not reactive under normal conditions.

## **Chemical Stability**

Stable under recommended storage conditions.

## **Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

#### **Conditions to Avoid**

Heat, flames and sparks. Avoid temperatures exceeding the flash point.

## **Incompatible Materials**

Strong acids. Strong oxidizing agents. Halogens.

## **Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure

## **Product Information**

**Eye Contact** Causes serious eye irritation.

**Skin Contact** Causes skin irritation.

**Inhalation** Harmful if inhaled.

**Ingestion** May be harmful if swallowed.

#### **Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Xylenes (o-, m-, p- isomers) 1330-20-7	= 3500 mg/kg (Rat)	> 1700 mg/kg (Rabbit) > 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat)4 h = 5000 ppm (Rat)4 h
Isopropyl Alcohol 67-63-0	= 1870 mg/kg(Rat)	= 4059 mg/kg ( Rabbit )	= 72600 mg/m³(Rat)4 h
Acetone 67-64-1	= 5800 mg/kg (Rat)	> 15700 mg/kg(Rabbit)	= 50100 mg/m³ (Rat) 8 h
Ethylbenzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg(Rabbit)	= 17.4 mg/L (Rat)4 h
Petroleum Distillate 64741-65-7	> 7000 mg/kg(Rat)	> 2000 mg/kg ( Rabbit )	> 5.04 mg/L (Rat)4 h

## Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

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

Germ cell mutagenicity May cause genetic defects.

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

However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Xylenes (o-, m-, p- isomers) 1330-20-7		Group 3		
Isopropyl Alcohol 67-63-0		Group 3		X
Ethylbenzene 100-41-4	A3	Group 2B		Х

## Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans
OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard** May be fatal if swallowed and enters airways.

## Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 3,270.00 mg/kg ATEmix (dermal) 1,930.00 mg/kg ATEmix (inhalation-dust/mist) 2.50 mg/L

## 12. ECOLOGICAL INFORMATION

## Ecotoxicity

Very toxic to aquatic life with long lasting effects.

#### Persistence/Degradability

Not determined.

#### **Bioaccumulation**

Not determined.

## **Mobility**

Chemical Name	Partition Coefficient
Xylenes (o-, m-, p- isomers) 1330-20-7	2.77 - 3.15
Isopropyl Alcohol 67-63-0	0.05
Acetone 67-64-1	-0.24
Ethylbenzene 100-41-4	3.2

## **Other Adverse Effects**

Not determined

# 13. DISPOSAL CONSIDERATIONS

## **Waste Treatment Methods**

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

## **US EPA Waste Number**

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Xylenes (o-, m-, p- isomers)		Included in waste stream:		U239
1330-20-7		F039		
Acetone		Included in waste stream:		U002
67-64-1		F039		
Ethylbenzene		Included in waste stream:		
100-41-4		F039		

## California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Xylenes (o-, m-, p- isomers)	Toxic
1330-20-7	Ignitable
Isopropyl Alcohol	Toxic
67-63-0	Ignitable
Acetone	Ignitable
67-64-1	
Ethylbenzene	Toxic
100-41-4	Ignitable

# 14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT

UN/ID No UN1993

**Proper Shipping Name** Flammable liquids, n.o.s. (Xylene, Acetone)

Hazard Class 3
Packing Group II

IATA

UN/ID No UN1993

**Proper Shipping Name** Flammable liquids, n.o.s. (Xylene, Acetone)

Hazard Class 3
Packing Group ||

**IMDG** 

UN/ID No UN1993

**Proper Shipping Name** Flammable liquids, n.o.s. (Xylene, Acetone)

Hazard Class 3
Packing Group II

# 15. REGULATORY INFORMATION

#### **International Inventories**

Chemical Name	TSCA	DSL/NDSL	EINECS/E	ENCS	IECSC	KECL	PICCS	AICS
			LINCS					
Xylenes (o-, m-, p- isomers)	X	Х	Х	Χ	Х	Χ	Х	Х
Isopropyl Alcohol	Х	Х	Х	Х	Х	Х	Х	Х
Acetone	Х	Х	Х	Х	Х	Х	Х	Х
Ethylbenzene	Х	Х	Х	Х	Х	Х	Х	Х
Petroleum Distillate	Х	Х	Х		Х	Х	Х	Х

#### Legend:

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

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

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

## US Federal Regulations

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Xylenes (o-, m-, p- isomers)	100 lb		RQ 100 lb final RQ
1330-20-7			RQ 45.4 kg final RQ
Acetone	5000 lb		RQ 5000 lb final RQ
67-64-1			RQ 2270 kg final RQ
Ethylbenzene	1000 lb	_	RQ 1000 lb final RQ
100-41-4			RQ 454 kg final RQ

## **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

## **CWA (Clean Water Act)**

This product does not contain any substances regulated as 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
Xylenes (o-, m-, p- isomers)	100 lb			Χ
Ethylbenzene	1000 lb	X	X	X

## **US State Regulations**

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Ethylbenzene - 100-41-4	Carcinogen

#### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Xylenes (o-, m-, p- isomers) 1330-20-7	Х	X	X
Isopropyl Alcohol 67-63-0	X	X	X
Acetone 67-64-1	X	X	X
Ethylbenzene 100-41-4	Х	X	X

## **16. OTHER INFORMATION**

NFPAHealth HazardsFlammabilityInstabilitySpecial Hazards230Not determinedHMISHealth HazardsFlammabilityPhysical hazardsPersonal Protection2\*30Not determined

Chronic Hazard Star Legend \* = Chronic Health Hazard

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## **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 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.

**End of Safety Data Sheet**