

Issue Date 07/24/2022

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Fleet Armor Off

Other means of identification

Product Code 1970

Details of the supplier of the safety data sheet

Company Name Blue Cardinal Chemical, LLC
3670 Scarlet Oak Blvd.
St. Louis, MO 63122
800-325-3312

Emergency telephone number

Emergency Telephone CHEMTEL 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 5
Acute toxicity - Dermal	Category 5
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

Label elements

Emergency Overview

WARNING

Hazard statements

May be harmful if swallowed
May be harmful in contact with skin
Causes skin irritation
Causes serious eye irritation



Appearance: Clear

Physical state: Liquid

Odor: Mild



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Skin Contact: Wash off immediately with plenty of water. Wash off immediately with plenty of water for at least 15 minutes. Wash off immediately with soap and plenty of water. If skin irritation persists, see a physician. Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Inhalation: Remove to fresh air. Ingestion: Clean mouth with water and drink afterwards plenty of water. 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. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. 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. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Drink plenty of water. Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Keep containers tightly closed in a dry, cool and well-ventilated place.

Precautionary Statements - Disposal

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Hazards not otherwise classified (HNOC)**Other Information**

- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life

Unknown Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO.	WEIGHT - %	TRADE SECRET
2-butoxyethanol	111-76-2	10-30	*
Tetrapotassium Pyrophosphate	7320-34-5	1-5	*
Nonylphenol Polyethylene Glycol Ether	127087-87-0	1-5	*
Sodium Laureth Sulfate	9004-82-4	1-5	*
2-Propanol	67-63-0	1-5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First aid measures****Skin Contact**

Wash off immediately with plenty of water. Wash off immediately with plenty of water for at least 15 minutes. Wash off immediately with soap and plenty of water. If skin irritation persists, see a physician.

Eye Contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Inhalation

Remove to fresh air.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effect, both acute and delayed**Symptoms**

Harmful by inhalation, ingestion, in contact with eyes and skin. May cause irritation of respiratory tract. May cause possibly severe irritation of the respiratory tract. Severely irritating to eyes. May be harmful in contact with skin. May be harmful if swallowed.

Indication of any immediate medical attention and special treatment needed**Note to physicians**

Treat symptomatically

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No Information available.

Explosion 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 procedures****Personal precautions**

Ensure adequate ventilation, especially in confined areas.

Environmental precautions**Environmental precautions**

Do not allow into any storm sewer drains, lakes, streams, ponds, estuaries, oceans or other surface water bodies. Should not be released into the environment. Dispose of according to all local city, state and federal rules and regulations.

Methods and material for containment and cleaning up**Methods for containment & cleaning up**

Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE**Precautions for safe handling****Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

CHEMICAL NAME	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m3 (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m3 (vacated) S* S*	DLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m3
2-Propanol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m3 (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m3 (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m3	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m3 STEL: 500 ppm STEL: 1225 mg/m3

Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m3 (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m3	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m3
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Appropriate engineering controls**Engineering Controls**

Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles).

Skin and body protection

Wear protective gloves and protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene

Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical State	Liquid
Appearance	Clear
Color	Brown
Odor	Mild
Odor Threshold	No Information available

Property**Values**

pH	10.0 - 11.0
Specific Gravity	1.01
Viscosity	Water Thin
Melting Point/Freezing Point	No Information available
Flash Point	No Information available
Boiling Point / Boiling Range	No Information available
Evaporation Rate	No Information available
Flammability (Solid, Gas)	No Information available
Flammability Limits In Air	
Upper Flammability Limit:	No Information available
Lower Flammability Limit:	No Information available
Vapor Pressure	No Information available
Vapor Density	No Information available
Water Solubility	Complete
Partition Coefficient	No Information available
Autoignition Temperature	No Information available
Decomposition Temperature	No Information available

Other Information

Density Lbs/Gal	8.5
Voc Content (%)	2.4

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical Stability

Stable under recommended storage conditions.

Possibility Of Hazardous Reactions

None under normal processing.

Conditions To Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11.TOXICOLOGICAL INFORMATION**Information on likely routes of exposure** Eyes, Ingestion, Inhalation, Skin**Product Information**

Skin Contact	May be harmful in contact with skin.
Eye Contact	Severely irritating to eyes.
Inhalation	May cause irritation of respiratory tract. May cause possibly severe irritation of the respiratory tract.
Ingestion	May be harmful if swallowed.

CHEMICAL NAME	ORAL LD50	DERMAL LD50	INHALATION LC50
2-butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 435 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h = 486 ppm (Rat) 4 h
Tetrapotassium Pyrophosphate 7320-34-5	= 2980 mg/kg (Rat)	-	-
Nonylphenol Polyethylene Glycol Ether 127087-87-0	= 1310 mg/kg (Rat) = 2590 mg/kg (Rat)	= 2 mL/kg (Rabbit) = 1780 µL/kg (Rabbit)	-
Sodium Laureth Sulfate 9004-82-4	= 1600 mg/kg (Rat)	-	-
2-Propanol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m3 (Rat) 4 h

Information on toxicological effects

Symptoms No Information available.

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

Sensitization No Information available.

Germ Cell Mutagenicity No Information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

CHEMICAL NAME	ACGIH	IARC	NTP	OSHA
2-butoxyethanol 111-76-2	A3	Group 3	-	-
2-Propanol 67-63-0	-	Group 3	-	X

Reproductive Toxicity	No Information available.
STOT - Single Exposure	No Information available.
STOT - Repeated Exposure	No Information available.
Chronic Toxicity	Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.
Aspiration Hazard	No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity **0 % of the mixture consists of ingredient(s) of unknown toxicity**

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

ATEmix (oral)	2,496 mg/kg
ATEmix (dermal)	2,619 mg/kg
ATEmix (inhalation-dust/mist)	10 mg/l
ATEmix (inhalation-vapor)	2,960 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

CHEMICAL NAME	ALGAE/AQUATIC PLANTS	FISH	CRUSTACEA
2-butoxyethanol 111-76-2	-	1490: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 2950: 96 h <i>Lepomis macrochirus</i> mg/L LC50	1000: 48 h <i>Daphnia magna</i> mg/L EC50
Tetrapotassium Pyrophosphate 7320-34-5	-	100: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50	100: 48 h water flea mg/L EC50
2-Propanol 67-63-0	1000: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 1000: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	11130: 96 h <i>Pimephales promelas</i> mg/L LC50 static 9640: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 1400000: 96 h <i>Lepomis macrochirus</i> µg/L LC50	13299: 48 h <i>Daphnia magna</i> mg/L EC50
Ethanol 64-17-5	-	12.0 - 16.0: 96 h <i>Oncorhynchus mykiss</i> mL/L LC50 static 13400 - 15100: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 100: 96 h <i>Pimephales promelas</i> mg/L LC50 static	9268 - 14221: 48 h <i>Daphnia magna</i> mg/L LC50 2: 48 h <i>Daphnia magna</i> mg/L EC50 Static
Sodium Sulfate 7757-82-6	-	3040 - 4380: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 13500: 96 h <i>Lepomis macrochirus</i> mg/L LC50 13500 - 14500: 96 h <i>Pimephales promelas</i> mg/L LC50 6800: 96 h <i>Pimephales promelas</i> mg/L LC50 static	2564: 48 h <i>Daphnia magna</i> mg/L EC50 630: 96 h <i>Daphnia magna</i> mg/L EC50

Persistence and Degradability

No information available

Bioaccumulation

No information available

CHEMICAL NAME	PARTITION COEFFICIENT
2-butoxyethanol 111-76-2	0.81
2-Propanol 67-63-0	0.05

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

CHEMICAL NAME	CALIFORNIA HAZARDOUS WASTE STATUS
2-Propanol 67-63-0	Toxic Ignitable

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT

Not regulated

15. REGULATORY INFORMATION**International Inventories**

TSCA Complies

DSL/NDL Complies

Legend:

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

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

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

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

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)

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). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product has been evaluated and does not require warning labeling under California Proposition 65.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-butoxyethanol 111-76-2	X	X	X
2-Propanol 67-63-0	X	X	X
Ethanol 64-17-5	X	X	X
Sodium Sulfate 7757-82-6	-	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA	Health hazards	1	Flammability	0	Reactivity	0	Other	-
HMIS	Health hazards	1	Flammability	1	Reactivity	0	Personal protection	X

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Revision Note

N/A = Not Applicable; N/D = Not Determined

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