MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product code	083-051-001
Material name	**BROWNELLS GUN KOTE, MATTE BLACK, AEROSOL**
Version #	01
Revision date	03-31-2011
CAS #	Mixture
Manufacturer information	BROWNELLS, INC. 200 South Front Street Montezuma,, Iowa 50171 United States www.brownells.com (641)-623-5401 24 hour Emergency Number, Call Collect: +1(352)-323-3500

2. Hazards Identification

Emergency overview	Will be easily ignited by heat, spark or flames. Harmful in contact with eyes. Cancer hazard. Irritating to skin. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Prolonged exposure may cause chronic effects.
OSHA regulatory status	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.
Eyes	Contact may irritate or burn eyes. Eye contact may result in corneal injury. Do not get this material in contact with eyes.
Skin	Irritating to skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Avoid contact with the skin.
Inhalation	May cause cancer by inhalation. Avoid breathing dust/fume/gas/mist/vapors/spray.
Ingestion	Components of the product may be absorbed into the body by ingestion. Do not ingest.
Target organs	Blood. Eyes. Liver. Respiratory system. Skin. Central nervous system.
Chronic effects	Unconsciousness. Conjunctiva. Jaundice. Cyanosis (blue tissue condition, nails, lips, and/or skin). Sterility. Liver injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. Pregnant women or women of child-bearing age should not be exposed to this product. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Signs and symptoms	Unconsciousness. Corneal damage. Narcosis. Cyanosis (blue tissue condition, nails, lips, and/or skin). Decrease in motor functions. Behavioral changes. Liver enlargement. Jaundice. Conjunctivitis. Defatting of the skin. Skin irritation. Rash. Birth defects. Sterility.

3. Composition / Information on Ingredients

Components	CAS #	Percent
DIMETHYL ETHER	115-10-6	40 - 60
CARBON BLACK	1333-86-4	2.5 - 10
ETHYL ALCOHOL	64-17-5	10 - 20
METHYL ETHYL KETONE	78-93-3	10 - 20
ETHYLACETATE	141-78-6	2.5 - 10

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Skin contact	Remove and isolate contaminated clothing and shoes. Wash off with warm water and soap. Get medical attention if irritation develops and persists. For minor skin contact, avoid spreading material on unaffected skin.
Inhalation	Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention if symptoms occur.
Ingestion	Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If ingestion of a large amount does occur, call a poison control center immediately.
Notes to physician	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General advice	If exposed or concerned: Get medical advice/attention. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties	Heat may cause the containers to explode.
Extinguishing media	
Suitable extinguishing media	Water. Foam. Dry powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Protection of firefighters	
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
Protective equipment and precautions for firefighters	In case of fire and/or explosion do not breathe fumes.
Specific methods	In the event of fire and/or explosion do not breathe fumes.

6. Accidental Release Measures

Methods for containment	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
Methods for cleaning up	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water.

7. Handling and Storage

Handling	DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. Do not get this material in contact with eyes. Avoid contact with skin. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling.
Storage	Keep away from heat and sources of ignition. Store in cool place. Refrigeration recommended. Store in a well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components	CAS #	Type	Value
CARBON BLACK	1333-86-4	TWA	3.5 mg/m3
ETHYL ALCOHOL	64-17-5	STEL	1000 ppm
ETHYLACETATE	141-78-6	TWA	400 ppm
METHYL ETHYL KETONE	78-93-3	STEL	300 ppm
		TWA	200 ppm

U.S. - OSHA

Components	CAS #	Type	Value
CARBON BLACK	1333-86-4	PEL	3.5 mg/m3
ETHYL ALCOHOL	64-17-5	PEL	1900 mg/m3
			1000 ppm
ETHYLACETATE	141-78-6	PEL	400 ppm
			1400 mg/m3
METHYL ETHYL KETONE	78-93-3	PEL	590 mg/m3
			200 ppm

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye / face protection Do not get in eyes. Chemical goggles are recommended.

Hand protection Wear protective gloves.

Skin protection Avoid contact with the skin. Wear appropriate chemical resistant clothing. Chemical resistant gloves.

General hygeine considerations When using do not smoke. Do not get in eyes. Avoid contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance Black.

Color Black.

Odor Paint-like

Odor threshold Not available.

Physical state Liquid.

Form Liquid.

pH Not available.

Melting point -118 °F (-83.3 °C)

Freezing point Not available.

Boiling point 171 °F (77.2 °C)

Flash point 25 °F (-3.9 °C)

Evaporation rate Not available.

Flammability Not available.

Flammability limits in air, upper, % by volume Not available.

Flammability limits in air, lower, % by volume Not available.

Vapor pressure 2866 hPa estimated

Vapor density Not available.

Specific gravity 1.3581 estimated

Relative density 1.358 g/cm3 estimated

Solubility (water)	Not miscible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	701.6 °F (372 °C) estimated
Decomposition temperature	Not available.
VOC	95 % estimated
Percent volatile	95 % estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition. May form explosive peroxides.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents. Ammonia. Amines. Isocyanates. Caustics. Nitrates.
Hazardous decomposition products	No hazardous decomposition products are known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Product	CAS #	Toxicity	Effect Level	Route	Species	Value	Test Duration
GUN KOTE, BLACK MATTE, AEROSOL	Mixture	Acute	LC50	Inhalation	Mouse	0.195 mg/l	
					Rat	23631 mg/l	
			LD50	Dermal	Rabbit	40000 mg/kg	
				Inhalation	Mouse	15000 mg/l	
					Rabbit	25000 mg/l	
					Rat	40000 mg/l	
				Oral	Mouse	4.4 g/kg	
					Rabbit	49.2 g/kg	
					Rat	28 g/kg	
				Other	Cat	30 g/kg	
					Guinea pig	30 g/kg	
					Mouse	18652 mg/kg	
						8300 g/kg	

Components	CAS #	Toxicity	Effect Level	Route	Species	Value	Test Duration
CARBON BLACK	1333-86-4	Acute	LD50	Oral	Rat	> 8000 mg/kg	
DIMETHYL ETHER	115-10-6	Acute	LC50	Inhalation	Mouse	494.36 mg/l	15.00 Minutes
						385.94 mg/l	30.00 Minutes
					Rat	308.5 mg/l	4.00 Hours
ETHYL ALCOHOL	64-17-5	Acute	LC50	Inhalation	Mouse	0.039 mg/l	4.00 Hours
					Rat	20000 mg/l	10.00 Hours
			LD50	Oral	Dog	5.5 g/kg	
					Guinea pig	5.6 g/kg	
					Mouse	3450 mg/kg	
					Rat	7060 mg/kg	
						17.8 g/kg	
						11.5 g/kg	
						10.6 g/kg	
						9.9 g/kg	
						6.2 g/kg	
				Other	Mouse	8285 mg/kg	
						1973 mg/kg	
						933 mg/kg	
					Rat	3750 mg/kg	
						1440 mg/kg	
ETHYLACETATE	141-78-6	Acute	LC50	Inhalation	Rat	16000 mg/l	6.00 Hours
			LD50	Inhalation	Mouse	1500 mg/l	4.00 Hours
					Rabbit	2500 mg/l	4.00 Hours
					Rat	4000 mg/l	4.00 Hours
				Oral	Mouse	0.44 g/kg	
					Rabbit	4.94 g/kg	
						4.9 g/kg	
					Rat	11.3 ml/kg	
						5.6 g/kg	
				Other	Cat	3 g/kg	
					Guinea pig	3 g/kg	
METHYL ETHYL KETONE	78-93-3	Acute	LC50	Inhalation	Mouse	11000 mg/l	45.00 Minutes
					Rat	11700 mg/l	4.00 Hours
			LD50	Dermal	Rabbit	> 8000 mg/kg	
				Oral	Mouse	670 mg/kg	
					Rat	4500 - 6800 mg/kg	
						2300 - 3500 mg/kg	
				Other	Mouse	1660 g/kg	24.00 Hours
					Rat	12290 mg/kg	24.00 Hours

Local effects Components of the product may be absorbed into the body through the skin. Blood disorder may occur after ingestion. Liver toxicity. Irritating to skin. Contact may irritate or burn eyes.

Chronic effects Hazardous by OSHA criteria. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause chronic effects.

Subchronic effects Blood disorder may occur after prolonged inhalation. Blood disorder may occur after ingestion. Blood disorder may occur after prolonged skin contact.

Carcinogenicity Hazardous by OSHA criteria. Cancer hazard. Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs: Overall evaluation

CARBON BLACK	1333-86-4	Possibly carcinogenic to humans.
ETHYL ALCOHOL	64-17-5	Carcinogenic to humans.

US ACGIH Threshold Limit Values: A3 carcinogen

ETHYL ALCOHOL	64-17-5	A3 Confirmed animal carcinogen with unknown relevance to humans.

US ACGIH Threshold Limit Values: A4 carcinogen

CARBON BLACK	1333-86-4	A4 Not classifiable as a human carcinogen.

Epidemiology Hazardous by OSHA criteria.

Neurological effects Hazardous by OSHA criteria.

Reproductive effects Hazardous by OSHA criteria. Possible reproductive hazard. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility.

Further information Reproductive toxicity. Symptoms may be delayed.

12. Ecological Information

Ecotoxicological data

Product	CAS #	Effect Level	Species	Value	Test Duration
GUN KOTE, BLACK MATTE, AEROSOL	Mixture	EC50	Daphnia	14867 mg/l	48.00 hours
		LC50	Fish	2667 mg/l	96.00 hours

Ecotoxicity Contains a substance which causes risk of hazardous effects to the environment.

Environmental effects An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence and degradability Not available.

13. Disposal Considerations

Waste codes D035: Waste Methyl ethyl ketone

US RCRA Hazardous Waste U List: Reference

ETHYLACETATE	141-78-6	U112
METHYL ETHYL KETONE	78-93-3	U159

Disposal instructions Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Dispose in accordance with all applicable regulations.

14. Transport Information

DOT

Basic shipping requirements:

Proper shipping name Aerosols, Flammable

Hazard class 2.1

UN number UN1950

Additional information:

ERG number 126

IMDG

Basic shipping requirements:

Proper shipping name	Aerosols, Flammable
Hazard class	2.1
UN number	UN1950

IATA

Basic shipping requirements:

Proper shipping name	Aerosols, Flammable
Hazard class	2.1
UN number	UN1950

15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

US CERCLA Hazardous Substances: Reportable quantity

ETHYLACETATE	141-78-6	5000 LBS
METHYL ETHYL KETONE	78-93-3	5000 LBS

CERCLA (Superfund) reportable quantity

KETONE 200PPM PEL/TLV: 5000.0000
ACTETIC ACID, ETHYL ESTER: 5000.0000

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
Section 302 extremely hazardous substance	No
Section 311 hazardous chemical	Yes

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

CARBON BLACK	1333-86-4	Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

CARBON BLACK	1333-86-4	Listed: February 21, 2003 Carcinogenic.

US - Illinois Chemical Safety Act: Listed substance

ETHYLACETATE	141-78-6	Listed.
METHYL ETHYL KETONE	78-93-3	Listed.

US - Massachusetts RTK - Substance List: Teratogen category

ETHYL ALCOHOL	64-17-5	Teratogen: sufficient evidence.

US - Massachusetts RTK - Substance: Listed substance

DIMETHYL ETHER	115-10-6	Listed.
CARBON BLACK	1333-86-4	Listed.
ETHYLACETATE	141-78-6	Listed.
ETHYL ALCOHOL	64-17-5	Listed.
METHYL ETHYL KETONE	78-93-3	Listed.

US - Minnesota Haz Subs: Cancer designation applies

CARBON BLACK	1333-86-4	Cancer designation applies.

US - Minnesota Haz Subs: Hazardous substance

DIMETHYL ETHER	115-10-6	Hazardous substance.
ETHYLACETATE	141-78-6	Hazardous substance.
ETHYL ALCOHOL	64-17-5	Hazardous substance.
METHYL ETHYL KETONE	78-93-3	Hazardous substance.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

DIMETHYL ETHER	115-10-6	500 LBS

US - Pennsylvania RTK - Hazardous Substances: Listed substance

DIMETHYL ETHER	115-10-6	Listed.
CARBON BLACK	1333-86-4	Listed.
ETHYLACETATE	141-78-6	Listed.
ETHYL ALCOHOL	64-17-5	Listed.
METHYL ETHYL KETONE	78-93-3	Listed.

US - Rhode Island RTK - Hazardous Substances: Listed substance

DIMETHYL ETHER	115-10-6	Listed.
CARBON BLACK	1333-86-4	Listed.
ETHYLACETATE	141-78-6	Listed.
ETHYL ALCOHOL	64-17-5	Listed.
METHYL ETHYL KETONE	78-93-3	Listed.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings Health: 2*
Flammability: 3
Physical hazard: 1

NFPA ratings Health: 2
Flammability: 3
Instability: 1

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