



SAFETY DATA SHEET

MOSI-GUARD NATURAL AEROSOL

According to Regulation (EC) No 1907/2006

1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

PRODUCT NAME MOSI-GUARD NATURAL AEROSOL 150mls

APPLICATION Insect repellent

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2 HAZARDS IDENTIFICATION

Extremely flammable.

CLASSIFICATION F+; R12

ENVIRONMENT The product is not expected to be hazardous to the environment.

PHYSICAL & CHEMICAL HAZARDS Pressurised container. Must not be exposed for temperatures above 50°C. The product is extremely flammable and explosive vapour/air mixtures may be formed even at normal room temperatures.

HUMAN HEALTH In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
BUTANE	203-448-7	106-97-8	10 - 30%	F+; R12
CIS- AND TRANS-P-MENTHANE-3,8-DIOL MIXTURE	255-953-7	42822-86-6	10 - 30%	Xi; R36
ETHANOL	200-578-6	64-17-5	36 - 50%	F; R11
ISOBUTANE	200-857-2	75-28-5	5 – 10%	F+; R12

PROPANE	200-827-9	74-98-6	5 – 10%	F+; R12
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The full text for all R-phrases are displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION	Move the exposed person to fresh air at once.
INHALATION	Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.
INGESTION	Not relevant.
SKIN CONTACT	Wash skin with soap and water. Get medical attention if any discomfort continues.
EYE CONTACT	Immediately rinse with water. Continue to rinse for at least 15 minutes. Make sure to remove any contact lenses from the eyes before rinsing. Get medical attention promptly if symptoms occur after washing.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA	Extinguish with carbon dioxide or dry powder.
SPECIAL FIRE FIGHTING PROCEDURES	Use water spray to reduce vapours. Aerosol cans may explode in a fire. Cool aerosol containers exposed to heat with water spray and remove container, if no risk is involved.
UNUSUAL FIRE & EXPLOSION HAZARDS	Extremely flammable. Forms explosive mixtures with air. May explode in a fire. Vapours are heavier than air and may spread near ground to sources of ignition.
SPECIFIC HAZARDS	Pressurised container: Must not be exposed for temperatures above 50°C. Fire creates: Carbon monoxide (CO). Carbon dioxide (CO ₂).
PROTECTIVE MEASURES IN FIRE	Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Wear protective clothing as described in Section 8 of this safety data sheet.
SPILL CLEAN UP METHODS	Extinguish all ignition sources. Avoid sparks, flames, heat & smoking. Ventilate. Collect in containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS	Keep away from heat, sparks and open flame. Read and follow manufacturer's recommendations. Avoid inhalation of vapours and spray mists. Do not spray on a naked flame or any incandescent material. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.
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STORAGE PRECAUTIONS Extremely flammable. Keep away from heat, sparks and open flame. Store in a cool and well-ventilated place. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
BUTANE	WEL	600 ppm	1450 mg/m3	750 ppm	1810 mg/m3
ETHANOL	WEL	1000 ppm	1920 mg/m3		
ISOBUTANE	WEL	600 ppm		750 ppm	
PROPANE	WEL	Asphyxiating		Asphyxiating	

INGREDIENT COMMENTS WEL = Workplace Exposure Limits

ENGINEERING MEASURES Provide adequate ventilation

EYE PROTECTION Wear suitable approved eye protection where eye exposure is reasonably probable.

HYGIENE MEASURES When using do not eat, drink or smoke. Wash promptly if skin becomes wet or contaminated.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Aerosol

ODOUR Characteristic

RELATIVE DENSITY 0.860 – 0.880 (liquid)

FLASH POINT (°C) < 0°C (propellant)

10 STABILITY AND REACTIVITY

STABILITY Stable under normal temperature conditions and recommended use

CONDITIONS TO AVOID Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

HAZARDOUS DECOMPOSITION PRODUCTS During fire, toxic gases (CO, CO₂) are formed

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 – LD 50 > 2,000 (estimated)

SKIN CONTACT	Skin irritation is not anticipated when used normally. Repeated exposure may cause skin dryness or cracking.
EYE CONTACT	Spray and vapour in the eyes may cause irritation and smarting.
HEALTH WARNINGS	In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Arrhythmia, (deviation from normal heart beat).
ROUTE OF ENTRY	Inhalation.
TARGET ORGANS	Central nervous system. Respiratory system, lungs.
MEDICAL SYMPTOMS	Narcotic effect. Vapours may cause drowsiness and dizziness.
Name	CIS AND TRANS P-MENTHANE-3,8-DIOL MIXTURE
Toxic Dose 1 - LD 50	> 2g/kg (oral rat)

12 ECOLOGICAL INFORMATION

ECOTOXICITY The product is not expected to be hazardous to the environment

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS Make sure containers are empty before discarding (explosion risk). Do not puncture or incinerate even when empty. Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical.

14 TRANSPORT INFORMATION



UK ROAD CLASS	2.1		
PROPER SHIPPING NAME	Aerosols		
UN NO. ROAD	1950	UK ROAD PACK GR.	#
ADR CLASS NO.	2.1	ADR CLASS	Class 2: Gases
ADR PACK GROUP	#	ADR LABEL NO.	2.1
CEFIC TEC ® NO.	20G5F	RID CLASS NO.	2.1
RID PACK GROUP	#	UN NO. SEA	1950
IMDG CLASS	2.1	IMDG PACK GR.	#

EMS	F-D, S-U	MARINE POLLUTANT	No
UN NO. AIR	1950	AIR CLASS	2.1
AIR PACK GR.	#		

15 REGULATORY INFORMATION



LABELLING

Extremely flammable

RISK PHRASES	R12	Extremely flammable
SAFETY PHRASES	S2	Keep out of the reach of children
	S9	Keep container in a well-ventilated place
	S16	Keep away from sources of ignition. No smoking.
	S51	Use only in well-ventilated areas.
	A1	Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
	A2	Do not spray on a naked flame or any incandescent material.

EU DIRECTIVES	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.
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STATUTORY INSTRUMENTS
Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE
Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES
Workplace Exposure Limits EH40.

16 OTHER INFORMATION

REVISION DATE	05-2008
REV. NO. / REPL. SDS GENERATED	1
RISK PHRASES IN FULL	R11 Highly flammable R12 Extremely flammable R36 Irritating to eyes