



Smoke Centurion


SAFETY DATA SHEET

SDS0089CA

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier	
Product Name	Smoke Centurion.
Trade Name	M8 Smoke-01-XXX (XXX denotes customer variant).
CAS No.	Mixture.
EINECS No.	Mixture.
1.2 Recommended use of the chemical and restrictions on use	
Identified Use(s)	Smoke simulation.
Uses Advised Against	None known.
1.3 Details of the supplier of the safety data sheet	
Company Identification	SDi 1345 Campus Parkway, Suite A18 Wall Township, NJ 07753 6815
Telephone	(732) 751 9266
Fax	(732) 751 9241
E-mail	sales@sdifire.com
1.4 Emergency telephone number	
Info Trac	1-800-535-5053

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
Hazardous Products Regulations	Flam. Aerosol 1: Extremely flammable aerosol.
2.2 Label elements	
Product Name	Smoke Centurion.
Hazard Pictogram(s)	
Signal Word(s)	GHS02 Danger.
Hazard Statement(s)	H222: Extremely flammable aerosol.
Precautionary Statement(s)	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211: Do not spray on an open flame or other ignition source. P251: Do not pierce or burn, even after use. P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.
Additional Information	Pressurized container: May burst if heated.
2.3 Other hazards	None.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product as supplied: Aerosol.

3.1 Mixtures

Hazardous Ingredient(s)	CAS No.	%W/W
Butane	106-97-8	50 – 100
Propane	74-98-6	10 – 25
Ethanol	64-17-5	0 – 5

3.2 Additional Information

None.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin Contact	Wash with plenty of water.
Eye Contact	Flush eyes with water for at least 15 minutes while holding eyelids open.
Ingestion	Unlikely route of exposure.

4.2 Most important symptoms and effects, both acute and delayed

None anticipated.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

Pressurized container: May burst if heated.

5.1 Extinguishing Media

Suitable Extinguishing Media	Extinguish with carbon dioxide, dry chemical, foam or water spray.
Unsuitable Extinguishing Media	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Heating may cause pressure rise with risk of bursting.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

The product is an aerosol. It is unlikely to present spillage or leakage hazard. In case of rupture, released content should be contained as any other solvent spill.

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Wear suitable gloves and eye/face protection.

6.2 Environmental precautions

Do not release large quantities into the surface water or into drains.

- 6.3 Methods and material for containment and cleaning up** Collect mechanically and dispose of according to Section 13. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a lidded container for disposal or recovery. Containers must not be punctured or destroyed by burning, even when empty.
- 6.4 Reference to other sections** See Also Section: 8, 13.

7. SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Provide adequate ventilation. Do not eat, drink or smoke during work. Wash hands thoroughly after handling.
- 7.2 Conditions for safe storage, including any incompatibilities**
 Storage temperature Observe official regulations on storing packagings with pressurized containers. Pressurized container: May burst if heated. Protect from sunlight and do not expose to temperatures exceeding 50°C /122 °F.
 Storage life Stable under normal conditions.
 Incompatible materials None anticipated.
- 7.3 Specific end use(s)** Smoke simulation.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Butane	106-97-8	800	-	-	-	Canada (Ontario)
		800	1900	-	-	Canada (Québec)
Propane	74-98-6	1000	-	-	-	Canada (Ontario)
		1000	1800	-	-	Canada (Québec)
Ethanol	64-17-5	-	-	1000	-	Canada (Ontario)
		1000	1880	-	-	Canada (Québec)

Source:
 CCOHS = Canadian Centre for Occupational Health and Safety

- Règlement 833 (Canada, Ontario)
- Règlement sur la santé et la sécurité du travail (Canada, Québec)

- 8.2 Appropriate engineering controls** Provide adequate ventilation.
- 8.3 Individual protection measures, such as personal protective equipment (PPE)**
 Eye/face protection If eye contact is likely: Wear protective eyewear (goggles, face shield, or safety glasses).



Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely.
Gloves: Nitrile rubber, NBR.

Respiratory protection



No personal respiratory protective equipment normally required. Handling of larger amounts: In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Not applicable.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Aerosol.
Color	Colorless.
Odor	Characteristic.
Odor Threshold	Not determined.
pH	Not determined.
Melting Point/Freezing Point	Not determined.
Initial boiling point and boiling range	-47.4°F (-44°C)
Flash Point	<32°F (<0°C)
Evaporation Rate	Not available.
Flammability (solid, gas)	Extremely flammable.
Upper/lower flammability or explosive limits	Explosive Limit Ranges: 1.5 – 15.0 Vol-%
Vapor pressure	62.4 psig (4.3 bar) @ 68°F
Density	36.2 lb/ft ³ (0.58 g/cm ³) @ 68°F
Vapor density	Not determined.
Relative density	Not determined.
Solubility(ies)	Immiscible with water.
Partition coefficient: n-octanol/water	Not determined.
Ignition temperature	689°F (365°C)
Auto-ignition temperature	Product is not selfigniting.
Decomposition Temperature	Not determined.
Kinematic Viscosity	Not determined.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

9.2 Other information

Organic solvents – Content	96.4%
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10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Stable under normal conditions.
10.4 Conditions to avoid	Heat and direct sunlight.
10.5 Incompatible materials	None anticipated.
10.6 Hazardous decomposition product(s)	None known.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.1 Mixtures

Acute toxicity	Low acute toxicity.
Irritation	Non-irritant.
Corrosivity	Not classified.
Sensitization	It is not a skin sensitizer.
Repeated dose toxicity	None anticipated.



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Carcinogenicity	No evidence of carcinogenicity.
Mutagenicity	There is no evidence of mutagenic potential.
Toxicity for reproduction	None anticipated.
Aspiration hazard	None anticipated.
11.2 Other information	None.

12. SECTION 12: ECOLOGICAL INFORMATION

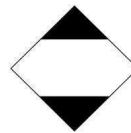
12.1 Toxicity	Low toxicity to aquatic organisms.
12.2 Persistence and degradability	The product is readily biodegradable. Unlikely to persist.
12.3 Bioaccumulative potential	The product has no potential for bioaccumulation.
12.4 Mobility in soil	Immiscible with water. The product is predicted to have low mobility in soil.
12.5 Other adverse effects	None.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Non-emptied aerosol: Dispose of wastes in an approved waste disposal facility. Do NOT landfill.
13.2 Additional Information	Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

14.1 UN number	UN 1950
ADR, IMDG, IATA, TDG	
14.2 UN proper shipping name	1950 AEROSOLS
ADR	AEROSOLS
IMDG, TDG	AEROSOLS, Flammable
IATA	
14.3 Transport hazard class(es)	
ADR	
Class / Classification	2 5F Gases.
Label	2.1
IMDG, IATA, TDG	
Class / Division	2.1
Label	2.1
14.4 Packing group	None.
ADR, IMDG, IATA, TDG	
14.5 Environmental hazards	No.
Marine Pollutant	
14.6 Special precautions for user	Warning: Gases.
Kemler Code	-
IMDG EMS	F-D, S-U
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
14.8 Additional Information	
ADR	
Limited Quantity (LQ)	1 L
ADR Transport Category	2
Tunnel Restriction Code	Not applicable in Limited Quantities.



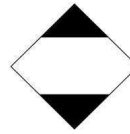


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IMDG, TDG

Limited Quantity (LQ)

1L



IATA, TDG

Limited Quantity (LQ)

1L



UN Model Regulation
US

UN 1950, AEROSOLS, 2.1
ORM-D when transported in limited quantities (< 30kg or
66lb gross weight).

15. SECTION 15: REGULATORY INFORMATION

This product has been classified in accordance with HPR and the SDS contains all the information required by HPR.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1 Canadian Regulations

Domestic Substances List (DSL)	All chemicals listed.
Export Control List	All chemicals are not listed.
Priority Substances List (PSL)	All chemicals are not listed.
Toxic Substances List	All chemicals are not listed.
National Pollutant Release Inventory (NPRI)	Listed: Propane (CAS No.: 74-98-6)
Substance List	Listed: Ethanol (CAS No.: 64-17-5)

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
ADR	Accord européen relative au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG	International Maritime Code for Dangerous Goods
IATA	International Air Transport Association
ORM-D	Other Regulated Materials for Domestic Transport Only
HPR	Hazardous Products Regulations
SDS	Safety Data Sheets

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