

Material Safety Data Sheet

According to ISO/DIS 11014

Data sheet No. MSDS 0084USA

Issue No 1

Date: 06-05-2008

Section 1 Identification of the substance/ preparation and of the company / undertaking

Product details – Trade name: smoke sabre

Part number: SS01-XXX (XXX denotes product variant)

Manufacturer/Supplier: Sdi 1345 Campus Parkway, Neptune, New Jersey 07753-6815 USA

Tel: (732) 938 9444 **Fax:** (732) 751 9266

Web: www.sdifire.com

Section 2 Composition/Data on components

Chemical characterization Description:

Active substance with propellant

Dangerous components:

| | | |
|---------------|---------|-----------|
| CAS: 106-97-8 | butane | 50 – 100% |
| CAS: 74-98-6 | Propane | 10-<25% |
| CAS: 64-17-5 | ethanol | 1.0-<2.5% |

Section 3 Hazards identification

Hazard description



Extremely flammable

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the “General Classification guideline for preparations of the EU” in the latest valid version.

Warning! Pressurized container.

Extremely flammable.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding **122°F** (50°C).

Do not pierce or burn, even after use.

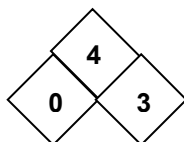
Do not spray on a naked flame or any incandescent material.

Keep away from sources of ignition – No smoking.

Build-up of explosive mixtures possible without sufficient ventilation.

Classification system: The classification is according to the latest editions of the international substances lists, and expanded upon by company and literature data.

NFPA ratings (scale 0-4)



Health = 0
Fire = 4
Reactivity = 3

WHMIS-ratings (scale 0-4)

HEALTH 0
FIRE 4
REACTIVITY 3

GHS label elements



Danger

2.2/1 -Extremely flammable gas.

2.3/1 -Extremely flammable aerosol.

Prevention:

Keep away from heat/sparks/open flames/hot surfaces. -No smoking.
 Do not spray on an open flame or other ignition source.
 Pressurized container: Do not pierce or burn, even after use.

Response:

Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
 Eliminate all ignition sources if safe to do so.

Storage:

Store in a well-ventilated place.
 Protect from sunlight. Do not expose to temperatures exceeding / 122°F/ 50°C.

Section 4 First-aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: Do not induce vomiting; immediately call for medical help.

Section 5 Fire-fighting measures

Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents: Water with full jet.
Protective equipment: No Special measures required.

Section 6 Accidental release measures

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
Measures for environmental protection: Do not allow to enter sewers/surface ground water.
Measures for cleaning/collecting: Ensure adequate ventilation.

Section 7 Handling and storage**Handling:****Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.
 Open and handle receptacle with care.

Information about fire and explosion protection:

Keep ignition sources away. - Do not smoke.
 Protect against electrostatic charges.
 Pressurized container: protect from sunlight and do not expose to temperatures exceeding 122°F (50°C), i.e. electric lights.
 Do not pierce or burn, even after use.
 Do not spray onto a naked flame or any incandescent material.

Storage:**Requirements to be met by storerooms and receptacles:**

Store in a cool location.
 Observe official regulations on storing packages with pressurized containers.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep receptacle tightly sealed.
 Do not seal receptacle gas tight.
 Store in cool, dry conditions in well sealed receptacles.
 Protect from heat and direct sunlight.

Section 8 Exposure controls and personal protection**Ingredients with limit values that require monitoring at the workplace:****106-97-8 butane**

| | |
|-----|-------------------------------------|
| REL | 1990 mg/m ³ , 800 ppm |
| TLV | Varies mg/m ³ , 1000 ppm |

74-98-6 propane

| | |
|-----|-------------------------------------|
| REL | 18000 mg/m ³ , 1000 ppm |
| REL | 1800 mg/m ³ , 1000 ppm |
| TLV | Varies mg/m ³ , 1000 ppm |

| | |
|------------------------|-----------------------------------|
| 64-17-5 ethanol | |
| PEL | 1900 mg/m ³ , 1000 ppm |
| REL | 1900 mg/m ³ , 1000 ppm |
| TLV | 1880 mg/m ³ , 1000 ppm |

General protective and hygienic measures:

Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosol product.

Breathing equipment:

In cases of brief exposure or low pollution, respiratory filter device is not applicable when used in a well ventilated environment. In cases of intensive or longer term exposure use self-contained respiratory protective device. Use suitable respiratory protective device in cases of insufficient ventilation.

Personal Protection:

Wear PPE (personal protective equipment) appropriate to the task and the environment

Section 9 Physical and chemical properties

| |
|---|
| General Information |
| Form: Aerosol |
| Colour: According to product specification |
| Odour: Characteristic |
| Change in condition |
| Melting point/Melting range: Undetermined |
| Boiling point/Boiling range: - 47°F (-44°C) |
| Flash point: <32°F (<0°C) |
| Ignition temperature: 689°F (365.0°C) |
| Self-igniting: Product is not self igniting. |
| Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures is possible. |
| Explosion limits: Lower: 1.5Vol% Upper: 10.9 Vol% |
| Vapor pressure at 68°F (20°C): 8300 hpa |
| Density at 68°F (20°C): 0.58 g/cm ³ |
| Solubility in/miscibility with water: Not miscible or difficult to mix. |
| Solvent content: Organic solvents: 97.5 % |

Section 10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions: No dangerous reactions known.

Dangerous decomposition products: No dangerous decomposition products known.

Section 11 Toxicological information

Acute toxicity:

Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

Section 12 Ecological information

General notes: generally not hazardous for water.

Section 13 Disposal considerations

Product: Recommendation: Must not be disposed of together with household garbage.

Uncleaned packaging:

Recommendation: Disposal must be made according to local / official regulations.

Section 14 Transport information

DOT regulations

Hazard class: 2.1

UN-Number: UN 1950

Packaging group:-

Proper shipping name AEROSOLS flammable

Label 2.1

Description of goods: 1950 AEROSOLS

Maritime transport IMDG:

IMDG Class: 2.1

UN Number 1950

Label 2.1

Packaging group:

EMS Number: F-D,S-U

Maritime pollutant: No

Proper shipping name: AEROSOLS

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 2.1

UN/ID Number: 1950

Label 2.1

Packaging group:

Proper shipping name: AEROSOLS, flammable

Transport Canada-TDG regulations

Primary Class: 2.1

UN Number: 1950

Label 2.1

Packaging group: None for Class 2, Gases

Proper shipping name: Aerosols

Section 15 Regulatory information

Sara

Section 355 (extremely hazardous substances):

None of the ingredients are listed

Section 313 (specific toxic chemical listings):

None of the ingredients are listed

TSCA (Toxic Substances Control Act):

106-97-8 butane

74-98-6 propane

64-17-5 ethanol

110-27-0 isopropyl myristate

Proposition 65

Chemicals known to cause cancer:

None of the ingredients listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients listed

Chemicals known to cause reproductive toxicity to males:

None of the ingredients listed

Chemicals known to cause developmental toxicity:

64-17-5 ethanol

Carcinogenity categories

EPA (Environmental Protection Agency):

None of the ingredients listed

IARC (International Agency for Research on Cancer):

None of the ingredients listed

NTP (National Toxicology Program):

None of the ingredients listed

TLV (Threshold Limit Value established by ACGIH):

64-17-5 ethanol

MAK (German Maximum Workplace Concentration):

64-17-5 ethanol

NIOSH-Ca (National Institute for Safety and Health):

None of the ingredients listed

OSHA-Ca (Occupational Safety and Health Administration):

None of the ingredients listed

Product related hazard information:

The product has been classified and marked in accordance with directives on hazardous materials.

Code letter and hazard designation of product:



Extremely flammable

Risk phrases:

Extremely flammable.

Safety phrases:

Keep out of the reach of children

Do not breathe fumes/aerosol

If swallowed, seek medical advice immediately and show this container or label

Use only in well-ventilated areas (or with appropriate PPE).

Special labelling of certain preparations: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 122°F (50°C).

Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Keep away from sources of ignition. - No smoking.

Build up of explosive mixtures possible without sufficient ventilation.

National regulations:

Technical instructions (air):

| Class | Share in % |
|-------|------------|
| NK | 50-100 |

Water hazard class: Generally not hazardous for water.

WHMIS (Canada)

Class A: Compressed gas

Class B-5: Flammable aerosol

16 Other information

Revision Status:

1. New Material Safety Data Sheet

06-05-2008

NOTE:

As our policy is one of continuous improvement, details of products described within this publication are subject to change without notice. All information provided here is believed to be correct at the time of going to press. Every effort has been made to ensure the accuracy of information which is provided in good faith but nothing contained herein is intended to incorporate any representation or warranty, either express or implied or to form the basis of any legal relations between the parties hereto, additional to or in lieu of such as may be applicable to a contract of sale or purchase.