



MATERIAL SAFETY DATA SHEET

No. MSDS0065USA
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Prepared according to ISO 11014 : 2009

1. IDENTIFICATION

Product Name: TRUTEST SMOKE DETECTOR SENSITIVITY TESTER
Part No(s): AERO400-XXX (SMOKE400) – xxx denotes product variant
Supplier/Manufacturer: Sdi
Address: 1345 Campus Parkway
Neptune, NJ 07753-6815
Telephone: +1 (732) 751 9266 **Fax:** +1 (732) 751 9241

2. HAZARDOUS IDENTIFICATION

Under normal usage this product has very low toxicity and is non flammable.

Inhalation: High concentrations can cause headaches, loss of concentration, tiredness and ultimately asphyxiation. Sudden exposure to very high levels may induce cardiac sensitization and possible heart attack. No side effects are noticed in normal use, and when used as directed

Skin Contact: When used as directed, no ill effects. Continuous direct contact may result in frostbite like effects (Defatted skin and dryness/irritation). Liquid residue may cause mild skin irritation.

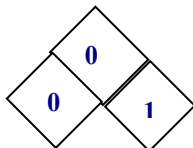
Eye Contact: Avoid contact with the eyes. Aerosols in large quantities may cause irritation. Large liquid splashes are considered unlikely in normal usage. Residue may cause irritation.

Ingestion: Direct spray causes serious cold burns to mouth and throat, low hazard for usual industrial handling.

Physical & Chemical Hazards: Heating will cause a rise in pressure with a risk of bursting if heated above 120°F (50°C). On combustion, toxic gases are released.

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

NFPA ratings (scale 0-4)



Health = 0
Fire = 0
Reactivity = 1

WHMIS-ratings (scale 0-4)

HEALTH = 0
FIRE = 0
REACTIVITY = 1

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Substance: A 217.5psi (15bar) Aerosol canister containing a mixture of oxy-hydrocarbons and 1,1,1,2-tetrafluoroethane, liquefied gas propellant.

Hazardous Ingredients:

Chemical Name	CAS No.	EEC No.	Class/Risk	Weight
1,1,1,2 tetrafluoroethane (HFC 134A)	811-97-2	212-377-0	None	>50%
Blended Oxy-hydrocarbons			F, R11	10 - 25%

4. FIRST AID MEASURES

Seek medical treatment when anyone has symptoms apparently due to inhalation or contact with skin or eyes

Inhalation: If symptoms from high concentrations are observed, immediately move patient to fresh air. If patient has stopped breathing, commence artificial respiration. Summon immediate medical attention. For protection, if ventilation is inadequate, the use of positive pressure air line respirators is required. Keep warm and at rest.

Skin Contact: If symptoms from direct spray or irritation are suffered, immediately wash the area with cold or tepid water for at least 15 minutes. Use soap if necessary.

Eye Contact: Immediately flush eyes with plenty of water or eyewash solution for at least 15 minutes, holding eyelids apart. If possible, remove contact lenses. Call physician if irritation persists.

Ingestion: Not specifically applicable (gas).

Other Requirements: Inhalation can cause cardiac sensitization. Adrenaline or similar sympathomimetic drugs should not be given.

5. FIRE FIGHTING MEASURES:

Aerosol cans may burst under fire conditions. Precautions (removal or spraying with water) may be taken against this risk.

In contact with flames, irritating and toxic fumes are evolved. If large quantities are present, wear self-contained breathing apparatus and evacuate area. Ventilate the area before resuming work.

Foam or any chemical extinguishing agents should be used.

6. ACCIDENTAL RELEASE MEASURES

If canister is ruptured, evacuate the area, except for personnel dealing with emergency. Extinguish or isolate power from sources of ignition. Ventilate area. Disperse vapor clouds with water spray. Cover drains, sewers etc. Inform authorities if major spillage occurs. Do not breath gas, do not smoke. Avoid contact with skin and eyes.

7. HANDLING AND STORAGE

Clothing/Safety Equipment: None required under normal usage.

Precautions for Use:

Do not spray on a naked flame or any incandescent material. Do not direct at face or eyes. Use in a well-ventilated area. If intending to use in particularly confined area please contact manufacturer for advice.

Storage:

Pressurized container: As with all aerosols, protect from sunlight and do not expose to temperatures exceeding 120°F (50°C). Do not pierce or burn, even when empty.

NOTE: In summer or on hot days extra care should be taken to protect from sunlight and other high temperatures. Even the trunk of a car can reach excessive temperatures. If in doubt an insulator/"Thermos" type bag should be used to store the cans.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION.

Hand/Eye Protection: Wear (PPE) Personal Protective Equipment appropriate to the task and the environment

Occupational Exposure Limit:

Gas: 1000ppm (Long term exposure limit - 8 hr TWA reference period)

Aerosol Mist: No OEL assigned.

Ventilation: Use product in a well ventilated place

Toxicity: Very low toxicity, weak anesthetic.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless gas, liquid under pressure. Aerosol is visible as a light mist.

Odor: Slight hydrocarbon smell.

Boiling Point: -15.7°F(-26.5°C) Propellant

Flash Point: Not Applicable.

Vapor Pressure: 81.2psi (5.6 Bar) at 77°F (25°C)

Liquid Density: 66.79lb/ft³ (1070 kg/m³) at 77°F(25°C)

Vapor Density: 3.5 (Air = 1)

Solubility: Total product is slightly soluble in water and soluble with most common organic solvents.

Partition Coefficient: Unknown

Other Data: The aerosol material is hygroscopic.

10. STABILITY AND REACTIVITY

Stability: Stable at ambient temperature and under normal conditions of use.

Hazardous Reactions: May decompose and form toxic gases on contact with hot surfaces and flames.

Incompatibility: Reacts violently with alkali metals, alkaline earth metals, magnesium, powdered metals.

Decomposition Products: On combustion or on thermal decomposition (pyrolysis) releases toxic gases. (Hydrofluoric acid, Fluorinated compounds)

11. TOXICOLOGICAL INFORMATION

Eye Contact:	Aerosol	High concentrations may cause eye irritation.
Skin Contact:	(Aerosol)	Repeated or prolonged skin application may cause mild skin irritation.
Inhalation:		High concentrations of aerosol may be irritant to the respiratory tract, and cause headaches, dizziness and possible loss of consciousness.
Ingestion:	(Aerosol)	Low oral toxicity.
Long Term Effects:		No evidence of significant effects.

12. ECOLOGICAL INFORMATION

Mobility:		Long term aerosol product is insoluble in water. All remaining components are highly volatile.
Degradability:		Decomposed comparatively rapidly in lower atmosphere. Atmospheric lifetime of propellant is 15.6 years. The product is anticipated to be substantially removed in biological treatment processes.
Short and Long Term Effects:		Propellant does not deplete ozone. Does not influence photochemical smog, and is designated non-VOC.

13. DISPOSAL CONSIDERATIONS

Do not pierce, incinerate or expose to temperatures above 120°F (50°C) even when empty.
Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

Designation of goods/Proper shipping name:

Aerosols, Non-flammable; (USA/EEC) Aerosols; (Canada)
ORM-D when transported in limited quantities (< 66lb or 30kg gross weight).(USA only)

UN No. 1950
UN Hazard Class: 2.2 Non-flammable gas

Maritime Transport (IMDG) Land/Sea Interface

IMDG Class: 2.2
Page Nos. IMDG Reference (Issue 2000) Vol2 page93 UN1950 Aerosols.

Land Transport

ADR/RID:

Class: 2.2 gasses that are compressed, liquefied or dissolved under pressure;
Item No. Item Number/Letter: 5° A

Air (IACO-TI/IATA)

Class: ICAO/IATA class: 2.2

15. REGULATORY INFORMATION

Product Label: Not Applicable.

Risk Phrases: R36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

- S2 Keep out of reach of children.
- S3 Keep in a cool place.
- S9 Keep container in a well-ventilated place.
- S23 Do not breathe spray.
- S24/25 Avoid contact with skin and eyes.
- S41 In case of fire and/or explosion do not breathe fumes.
- S51 Use only in well ventilated areas.

WHMIS (Canada): Class A: Compressed Gas.

References:

The Chemicals (Hazard Information & Packing) Regulations July 2003. (CHIP 3)
The Control of Substances Hazardous to Health Regulations 1999.
The Health and Safety at Work Act 1974.

16. OTHER INFORMATION

For further Technical and Safety information contact:-

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Revision Status

Issue 1: New Material Safety Data Sheet	09.16.02
Issue 2: Section 15 CHIP 3 amendment review	07.07.03
Issue 3: Section 8 include PPE detail / Sections 3,7, 13 amend exposure condition to 120°F	03.23.05
Issue 4: Section 3 include NFPA and WHMIS ratings	03.18.09
Issue 5: Sections 2 and 3 reversed in accordance with REACH directive	03.11.10

NOTE:

Because our policy is one of continuous improvement, details of products described within this publication are subject to change without notice. All information provided within this publication 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.