



COSHH Risk Assessment

MD138

SUBSTANCE INFORMATION

Substance/material: [Trusted smoke detector sensitivity tester](#)

Trade name: [Aero 400](#)

What is the substance used for? [Smoke detector testing](#)

(E.g. cleaning floors, protective coating, etc.)

What are the hazardous ingredients/chemicals in the substance? (List below)

[1,1,1,2-Tetrafluoroethane](#)

[Pentane](#)

[Propan-2-ol](#)

Do any of the chemicals have a:

Workplace Exposure Limit? (State opposite)

[1,1,1,2-Tetrafluoroethane CAS No. 811-97-2, \(8 hr TWA ppm\) 1000 \(8 hr TWA mg/m³\) 4240](#)

[Pentane CAS No. 109-66-0, \(8 hr TWA ppm\) 600 \(8 hr TWA mg/m³\) 1800](#)

[Propan-2-ol CAS No. 67-63-0, LTEL \(8 hr TWA ppm\) 400 LTEL \(8 hr TWA mg/m³\) 999, STEL \(ppm\) 500, STEL \(mg/m³\) 1250](#)

Is the substance: (Check for an orange 'CHIP' square on the product data sheet or packaging.)

- | | | | |
|---|--|---|---|
| <input type="checkbox"/> Extremely flammable? | <input type="checkbox"/> Oxidising? | <input type="checkbox"/> Very toxic? | <input checked="" type="checkbox"/> Sensitising? |
| <input checked="" type="checkbox"/> Highly flammable? | <input checked="" type="checkbox"/> Harmful? | <input type="checkbox"/> Corrosive? | <input checked="" type="checkbox"/> Other? (Specify below.) |
| <input type="checkbox"/> Flammable? | <input type="checkbox"/> Toxic? | <input checked="" type="checkbox"/> Irritant? | Pressurised container may burst if heated |
| | | | Harmful to aquatic organisms |

Is the substance hazardous to health when:

- | | | |
|--|---------------------------------------|--|
| <input type="checkbox"/> In contact with skin? | <input type="checkbox"/> Breathed in? | <input type="checkbox"/> Other (Specify below) |
| <input type="checkbox"/> In contact with eyes? | <input type="checkbox"/> Swallowed? | |

USE OF SUBSTANCE

How should the substance be used? [Sprayed](#)

(E.g. diluted in water, applied with a brush, sprayed, etc.)

How much is used every week? [Occasional Use, small quantities](#)

(State quantity in litres or kilos as appropriate.)

Who is exposed to the substance? [Personnel using the product.](#)

(E.g. those using it, pupils, service users, etc.)

Does the substance present additional risks to certain groups or individuals?

(E.g. young people, expectant mothers.)

[Not specified on product Safety Data Sheet.](#)

CONTROL MEASURES

Can a less hazardous substance be used to do the same job? Yes No

(If you don't know, please contact your supplier for further information.)

What controls are required for this substance, other than Personal Protective Equipment (PPE)?

(E.g. well ventilated areas, not in spray/mist form, mechanical ventilation, authorised persons only.)

[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.](#)

Is any Personal Protective Equipment (PPE) required when using the substance?



Eye protection? (State type required)



Gloves?



Overalls/clothing? (State type required)



Mask/respirator? No personal respiratory protective equipment normally required. Handling of larger amounts: In case of insufficient ventilation, wear suitable respiratory equipment. A suitable mask with filter type A (EN14387 or EN405) may be appropriate



Other? (State type required)

How should the substance be stored? (E.g. locked cupboard, away from other substances, etc.)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

NOTE: In summer or on hot days, in cars/vans protect from sunlight and other high temperatures with the use insulator/thermos type bags.

Please turn over

Have persons using this substance been provided with information or training on its use? Yes
(As a minimum ensure a copy of this assessment is in a known and readily accessible location.) No

OTHER PRECAUTIONS AND EMERGENCY PROCEDURES

Spillages: How should an accidental release/spillage of this substance be dealt with?

If canister is ruptured, evacuate the area, except for personnel dealing with emergency. Extinguish or isolate power from sources of ignition. Ventilate area. Disperse vapour 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.

First aid: What actions should be taken if the substance is:

a) Swallowed?

b) In contact with eyes?

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.

c) In contact with skin?

Wash with soap and water

d) Inhaled?

If symptoms from high concentrations are observed, immediately move patient to fresh air.

e) Other? (Please specify.)

Fire precautions: What actions should be taken in the event of fires involving this substance?

Foam or any chemical-extinguishing agents should be used.

Chemical reactions: Is there any other substance that this substance must not come into contact with?

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

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

On combustion or on thermal decomposition (pyrolysis) releases toxic gases.

Disposal: How should the substance be disposed of (or not disposed of)?

Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Non-emptied aerosol: Do not allow to enter drains, sewers or watercourses. Do NOT landfill. Disposal should be in accordance with local, state or national legislation.

Health surveillance: Do staff using the substance require any health surveillance?

No.

ASSESSMENT OF RISK

Are all the controls detailed above currently in place? Yes No

If these controls are not in place, or additional controls are required, state action to be taken.

Please note - COSHH substances must **NOT** be used if adequate control measures are not in place.

Remedial actions required	Date for completion

Are hazards to health adequately controlled with all control measures in place? Yes No

Assessor(s) name: Chris Ogden	Assessor(s) signature: Chris Ogden	Date: 01/01/19
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The Line Manager should sign below to show that the assessment is a correct and reasonable reflection of the hazards and of the control measures and actions required.

Line Managers name:	Line Managers signature:	Date:
Remedial actions complete: (Date)	Line Managers signature:	Reviewed on: (Date)

A copy of the product safety data sheet must be attached to this assessment.