



Product Number: 66

3-2-1 Fire Retardant Liquid

- First, spray a small sample of the material to ensure it is colour fast.
- FURNITURE: Spray all the areas, which have foam underneath the material, so the material is absorbing the 321 liquid.
- Place the chair or settee on its back & spray all the underside material.
- Place the furniture upright, spray the back, sides & front of the furniture, ensuring that the material is wet with 321 liquid.
- Should the seat cushions be removable, spray all material under seat cushions, ensuring that you get 321 down the gaps.
- Should the seat cushions have a zip fastener, then unzip & spray 321 over the internal sponge material & all over the outer material, ensuring by pressing in with fingers, so that the sponge / polyurethane absorbs the 321.
- Re-spray areas such as the backs & arms of chairs, which have sponge foam underneath the material, & using fingers, pad or cloth, press the 321 through the material into the sponge. This procedure should also be carried out on the cushions that cannot be unzipped. Ensure that these sponge areas are well soaked. (Note – If the material is 60% polyester, do ensure that the foam areas are very well soaked). See below for leather & rexine covered furniture.
- CURTAINS: If it is a single material & not lined curtains, spray while hanging, until the material is moist. Spraying only needs to be carried out on one side. For lined curtains, then both sides of the curtain must be sprayed. Apply to both sides equally for lined curtains.
- CARPETS: Carpets can be sprayed while laid, if foam backed, then with a cloth or pad press into the carpet as you spray, to ensure that the 321 is absorbed into the backing.
- BEDDING MATTRESSES: If it is possible, take off the cover of the mattress, then spray into the foam; pressing 321 into the foam material with a cloth pad, ensuring that the foam absorbs all the 321 thoroughly, then spray the cover until it is completely wet. Should the cover not be removable, the spray over the cover, pressing the 321 into the foam until you feel it is totally absorbed.
- LEATHER & REXINE FURNITURE: With this type of covered furniture, the only way to treat the foam is to tip the chair on its back, take off the underneath material & spray 321 up inside the foam. With your fingers, ensure that the 321 is getting thoroughly absorbed into the foam. For added safety in your kitchen, soak a tea towel in 321 & leave it near the cooking area, so that if you have a pan fire, the tea towel can be placed over to help put out the fire.

Guide to the amount of 321 required for curtains, bed covering, etc., 6-10 m² per litre. Foam filled furniture, approximately 5-7 m² per litre, according to the amount of polyurethane foam



Product Number: 66

3-2-1 Fire Retardant Liquid

Description:

Envirograf® 3-2-1 is an aqueous, odourless, flame-retardant liquid. For use on many absorbent materials including canvas, cardboard, clothing, curtains, carpets, dust sheets, polyurethane furniture, polystyrene, tents, upholstery, wallpaper, and even some nylon materials. Can be used on living and artificial Christmas trees. **3-2-1** liquid is clear, and items treated with it can be dry cleaned.

This product comprises of the following materials and therefore is supported by Health & Safety Data Sheets:

- Appendix 10 (3-2-1)

*The information contained in this safety data sheet is given in good faith. It is accurate to the best of our knowledge and belief and represents the most up to date information. The information given in this data sheet does not constitute or replace the user's own assessment of workplace risk as required by other health and safety legislation.

HEALTH & SAFETY INFORMATION SHEET
APPENDIX 10
321 STANDARD FIRE PROTECTION LIQUID

Issue 2 September 2015

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

PRODUCT NAME: 321 Standard Fire Protection Liquid
MANUFACTURER/SUPPLIER: Envirograf
ADDRESS: Envirograf House, Barfrestone, Dover, Kent, CT15 7JG
TELEPHONE / FAX / EMAIL: 01304 842555 01304 842666 sales@envirograf.com
EMERGENCY PHONE NUMBER: 01304 842555 (Monday to Friday 8.30 – 5.30)

2. HAZARDS IDENTIFICATION

HEALTH EFFECTS: The primary routes of exposure to this material is by skin & eye contact. Product may be irritating to the skin & eyes.

3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL CHARACTERISATION: Complex mixture of Organic & Inorganic compounds

HAZARDOUS INGREDIENTS: PHRASES	CONCENTRATION (%)	HAZARD SYMBOL,	RISK
n/a	n/a	n/a	n/a

4. FIRST AID MEASURES

SKIN CONTACT: Remove contaminated clothing, wash skin with soap and water. If irritation occurs, seek medical advice.

EYE CONTACT: Rinse immediately with plenty of water, seek medical advice.

INHALATION: Remove patient to fresh air and seek medical advice.

INGESTION: Do not induce vomiting. If conscious give plenty of water or milk. Obtain medical advice.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Select extinguishing media appropriate to other materials involved in/or circumstances of fire.

SPECIFIC FIRE/EXPLOSION HAZARD: None known.

PROTECTIVE EQUIPMENT: Wear approved respirators, suitable protective clothing and gloves.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid creating and breathing any fumes.

ENVIRONMENTAL PRECAUTIONS

MEASURES AFTER SPILLAGE: Contain spilled material immediately with sand or absorbent material and vacuum or shovel into closable containers for disposal

7. HANDLING AND STORAGE

HANDLING: Avoid contact with skin and eyes when using do not eat, drink or smoke. Ensure adequate ventilation in workplace.

STORAGE: Keep containers tightly closed in a cool, well ventilated place. Protect from frost.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION:

RESPIRATORY PROTECTION: None.

HAND PROTECTION: Wear suitable gloves.

EYE PROTECTION: Wear face / eye protection.

BODY PROTECTION: Wear protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM:	Clear Colourless Liquid
ODOUR:	Slight
PH:	7-8 (Neat)
BOILING POINT/RANGE:	Not known
MELTING POINT/RANGE:	Not applicable
FLASH POINT:	Not known
FLAMMABILITY LIMITS:	Not known
RELATIVE DENSITY:	Not applicable
SOLUBILITY IN WATER:	Miscible in water
SPECIFIC GRAVITY:	1.1 – 1.25 at 20°C

10. STABILITY AND REACTIVITY

STABILITY: Stable.

MATERIALS TO AVOID: Avoid contact with strong oxidizing agents, strong reducing agents and strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

11. TOXICOLOGICAL INFORMATION

INGESTION: Acute toxicity: Oral LD50 (rat) > 2000 mg/kg

SKIN CONTACT: May be irritating to skin

EYE CONTACT: May be irritating to eyes

12. ECOLOGICAL INFORMATION

MOBILITY: Not known

PERSISTENCE AND DEGRADABILITY: Not known

BIOACCUMULATION: Not known

13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL: Dispose of in accordance with local regulations. Do not discharge into drains or the environment. Dispose to an authorised waste collection point.

CONTAINER DISPOSAL: Treat packages as for product.

14. TRANSPORT INFORMATION

UK TRANSPORT INFORMATION

UK ROAD/RAIL: Not applicable. None hazardous.

IMDG: Not applicable. None hazardous.

ICAO: Not applicable. None hazardous.

ADR: Not applicable. None hazardous

15. REGULATORY INFORMATION

LABELLING INFORMATION

R PHRASES

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S PHRASES

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16. OTHER INFORMATION

RECOMMENDED USE: Flame retardant liquid for use on may absorbent materials

OTHER INFORMATION: See technical data sheet

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Product Number: 66

3-2-1 Fire Retardant Liquid Standard

Description:

Envirograf® 3-2-1 is an aqueous, odourless, flame-retardant liquid. For use on many absorbent materials including canvas, cardboard, clothing, curtains, carpets, dust sheets, polyurethane furniture, polystyrene, tents, upholstery, wallpaper, and even some nylon materials. Can be used on living and artificial Christmas trees. **3-2-1** liquid is clear, and items treated with it can be dry cleaned.

Material Specification:

PHYSICAL FORM	Clear Colourless Liquid
ODOUR	Slight
PH	7-8 (Neat)
BOILING POINT/RANGE	Not known
MELTING POINT/RANGE	Not applicable
FLASH POINT	Not known
FLAMMABILITY LIMITS	Not known
RELATIVE DENSITY	Not applicable
SOLBILITY IN WATER	Miscible in water
SPECIFIC GRAVITY	1.1 – 1.25 at 20°C
SHELF LIFE	12 Months from Date of Manufacture.
VOC	0

Ordering References:

Available in a range of sizes including ½ litre spray bottles, 1 litre, 2 litre and 5 litre bottles, 25 litre tubs and 2½ litre and 3½ litre packs (which include a half litre refillable spray bottle)

Ref:

3-2-1 + size required