

MATERIAL SAFETY DATA SHEET

(MSDS)

ITEM NUMBER : 606

IDENTITY (as used On Label) :

Section I - MANUFACTURER

Advanced Technology Processing
Brazenose House
Lincoln Square
Manchester M2 5BL
ENGLAND

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European Emergency Medical Telephone Number : 00 33.4.78.55.07.43

Emergency 24 hour Telephone number : (800) 424.9300 (USA)

Name Of Laboratory Assistant : Aurélie Beroud

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components (Chemical Identity - Common Name) TLV Other Limits %
Opt.

Recommended

ETHANOL	CAS N° 65-56-1	TWA : 200 ppm V
BUTANE/PROPANE	CAS N° 106-97-8 / 74-98-6	TWA : 1000 ppm V
V.O.C.	< 65 % in weight	

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point : -23°C

Specific Gravity (H₂O = 1): 1

Solubility in Water : Negligible

Melting Point : 80° C

Vapour Density (Air = 1) : N.D.

Self-ignition temperature: 350°C

Evaporation Rate (Butyl Acetate = 1) : >1

Explosivity characteristics: Limits in air from 3 to 18.6%

Vapour pressure : 20°C 5 bars
50°C 10 bars

Density (water=1): 0.705

Appearance and Odour : Clear fluid liquid, and smell very slightly ether

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used) : Around – 40°C

Flammable Limits - LEL : 3,4 % vol.

UEL : 18 % vol

Extinguishing Media : Powder, foam, fine spray of water, carbon dioxide (CO₂).
Large fire: spray-nozzle fire hoses (the cyclone of air and atomized water formed by the nozzle dilutes the gas to below the lower limit of inflammability)

Special Fire Fighting Procedures : Spray with fine spray to cool surfaces exposed to the fire (overheated aerosols are likely to burst) and to protect people from the heat.

Unusual Fire and Explosion Hazards : At elevated temperatures (over 50°C=120F) containers may vent, rupture or burst.

SECTION V - REACTIVITY DATA

Stability : **Unstable :** No **Stable :** Yes, under normal conditions of use. The aerosol subject to temperatures at 50°C can buckle, explode and be thrown at an important distance.

Conditions to Avoid : Strong oxidising agents.

Incompatibility (Materials to Avoid) : Alkaline metals, earthy-alkaline metals salts in powder form, Al, Zn, Be. containing more than 2 % of magnesium.

Hazardous Decomposition or By-products : Carbon oxides.

Hazardous Polymerisation : **May Occur :** No **Will Not Occur :** X

Conditions to Avoid : Pressurised container. Protect it from sun rays and do not expose to a temperature higher than 50°C (120 F). Do not puncture it or burn it even after use. Do not spray on a flame or any incandescent objet. Keep away from children.

SECTION VI - HEALTH HAZARD DATA

Route(s) of Entry : **Inhalation :** X **Skin :** **Ingestion :** X

Health Hazards (Acute and Chronic) : NA

Carcinogenlely : ND **NTP :** ND **IARC Monographs :** ND

OSHA Regulated: ND

Signs and Symptoms of Exposure :

* INHALATION : concentrations at a higher T. W. A. ; level may produce narcotic side effects. Inhalation of high concentration decomposition products might create respiratory deficiency.

- * **OCULAR CONTACT** : temporary irritation eyewash must be done quickly and extensively in asking the patient to keep his eyelids wide open carrying out an ocular rotation should the irritation persist then call an MD.
- * **SKIN CONTACT** : possible frostbite.

Medical Conditions Generally Aggravated by Exposure :

Long term toxicity : did not show any carcinogenic, teratogenic and mutagenic side effects during animal tests.

Emergency and First Aid Procedures : Call a physician. Waiting him :

- * **INGESTION** : Treat as in case of inhalation and call for a doctor.
- * **INHALATION** : Take the person outside.
- * **EJECTION IN EYES** : Immediately wash with water keeping the eyelids well apart (get the person to roll his/her eyes) until the irritations stop. If irritation continues, call for a doctor.
- * **CONTACT WITH SKIN** : In the case of frostbite, treat it as you would a heat burn.

Note To Physician : None

Section VII - Precautions for Safe Handling and Use

Steps To Be Taken in Case Material is Released or Spilled : Avoid breathing, avoid skin contact. Remove ignition sources. Soak up with absorbent inert material. Destruction in agreement centre.

Waste Disposal Method : Do not puncture or incinerate containers. Destruction in agreement centre. Don't discharge in sewer nor natural middle. Discharge : conformity with regulation in use.

Precautions To Be Taken In Handling And Storing : Do not store where temperatures could exceed 50°C (120 F).

Other Precautions : None.

SECTION VII - CONTROL MEASURES

Respiratory Protection (Type) : None

Ventilation : Yes

Local Exhaust : Preferred

Mechanical (General) : Should be on if spraying large amounts.

Protective Gloves : To avoid contact of liquid with skin, carry neoprene or rubber gloves.

Eye Protection : Safety glasses if ejection hazard.

Other Protective Clothing or Equipment : None.

Work/ Hygienic Practices : No smoke.

NA : Not Applicable **NE** : Not Established **UN** : Unavailable **ND** : Not Determined

The information provided herein was believed to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use.