



## **MATERIAL SAFETY DATA SHEET**

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### **1. Chemical Product and Company Identification**

Product Name: LASER SCRIPTOR METAL

Manufacturer: AUTOMATISA SISTEMAS LTDA  
ROD SC 401, KM 1  
PARQUE TECNOLÓGICO ALFA  
FLORIANÓPOLIS – SC  
88030-000 BRASIL

Phone Number: 55 48 239-2240  
Fax Number: 55 48 239-2234

Emergency Phone : 55 48 239-2240

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### **2. Composition / Information on Ingredients**

**Product Type:** Pigment

**Chemical Nature:** Mixture of inorganic oxides

<b>Componets</b>	<b>CAS Number</b>
Propane	74-98-6
n- Butane	106-97-8
Ethyl Alcohol (Ethanol)	64-17-5
Pigments	mixture

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### **3. Hazards Identification**

**Emergency Overview:**

Extremely Flammable Aerosol! Vapors may cause flash fire. Contents under pressure. Heated can may rupture. Inhalation may cause headache, dizziness, drowsiness, nausea, narcosis and unconsciousness. Intetional misuse such as deliberate concentration and inhalation of vapors may be harmful or fatal.

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### **4. First Aid Measures**

**Eyes:** In case of eyes contact, remove contact lenses if present and flush eyes with running water for at least 15 minutes. If irritation persists, seek medical attention.

**Skin:** For skin contact wash thoroughly with soap and water. If irritation develops, seek medical attention.

**Ingestion:** Rinse mouth out with water. Never attempt to induce vomit. Do not give anything by mouth to an unconscious or convulsing person. Get a medical attention.

**Inhalation:** Move person to fresh air. Seek medical attention if irritation or other symptoms persist.

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## 5. Fire Fighting Measures

**Extinguishing Media:** Use foam, carbon dioxide, dry chemical, water fog or water spray.

**Unusual Fire and Explosion Hazards:** Extremely flammable aerosol. Propellant gases and product vapors may ignite explosively and cause flash fire. Vapors are heavier than air and can travel along surfaces to remote ignition source and flash back. Aerosol cans may burst in the heat of fire.

**Special Fire Procedures:** Firefighters should wear positive pressure self – contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored. Fight fire from a safe distance. Protect against rupturing cans.

**Hazardous Combustion Products:** Burning may produce carbon dioxide and carbon monoxide. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant

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## 6. Accidental Release Measures

Eliminate all ignition sources. Ventilate area. Wear appropriate protective clothing and equipment (see section 8). Contain and collect spill with inert materials such as commercial absorbent, sand or earth and place in appropriate, labeled container for hazardous waste disposal. Avoid contamination of water supplies and environmental releases. Report spills as required to authorities.

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## 7. Handling and Storage

**Handling:** Prevent prolonged or repeated breathing vapors, mists and aerosol spray. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Wear appropriate protective clothing when handling this material. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Prevent Buildup of vapors. Use only as directed. Keep away from heat, sparks, flames and all other sources of ignition. Do not smoke.

**Storage:** Store product below 45° C (120° F) in a cool; dry, well ventilated place away from direct sunlight, excessive heat and incompatible materials. Do not puncture or incinerate containers.

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## 8. Exposure Controls / Personal Protection

### Exposure Limits

Component	Exposure Limit	Source
Propane	2500 ppm Time Weighted Average 1000 ppm Time Weighted Average	ACGIH OSHA
n-Butane	800 ppm Time Weighted Average	ACGIH
Ethyl Alcohol (Ethanol)	1000 ppm Time Weighted Average 1000ppm Time Weighted Average	ACGIH OSHA
Pigment	None established	

**Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain concentration of hazardous constituents below recommended limits. Use explosion proof equipment where required.

**Respiratory Protection:** Not necessary if workplace concentrations hazardous constituents are below recommended limits. If the exposure limits exceeded, a NIOSH approved respirator should be worn. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 19010.134, ANSI Z88.2 and good Industrial Hygiene practice.

**Eye Protection:** Safety glasses or goggles recommended.

**Skin Protection:** Impervious gloves recommended where contact is likely. Wear protective clothing as required to avoid prolonged or repeated skin contact.

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## 9. Physical and Chemical Properties

**Appearance and Odor:** Gray liquid packaged as an aerosol spray with alcohol odor.

**Solubility in Water:** Insoluble

**pH:** Not Applicable

**Specific Gravity:** Not Available

**Vapor Density:** Not Available

**Evaporation Rate:** Not Available

**Vapor Pressure:** Not Available

**Partition Coefficient:** Not Available

**Flash Point:** -11° C (12° F)

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## 10. Stability and Reactivity

**Stability:** Stable

**Incompatibility:** Not Available

**Hazardous Decomposition Products:** Not Available

**Hazardous Polymerization:** Not Available

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## 11. Toxicological Information

None of the components is listed as a potential carcinogen by IARC, NTP or OSHA

**Primary irritant effect:**

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

**Subacute to chronic toxicity:**

Excessive exposure to any dust may aggravate pre-existing respiratory conditions. Repeated or prolonged exposure to the product which may become dust produce damage to the lungs. Respirator protection should be provided in industrial situations.

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## 12. Ecological Information

This product has not been tested.

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## 13. Disposal Consideration

Consult state, local or national regulations for proper disposal.

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## 14. Transport Information

**DOT Regulations:** Aerosol, Class 2.1, UN1950

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## 15. Regulatory Information

**Risk phrases:**

R5 Heating may cause an explosion.

R10 Flammable.

R36 Irritating to eyes.

R38 Irritating to skin.

R43 May cause sensitization by skin contact.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

**Safety phrases:**

S16 Keep away from sources of ignition

S22 Do not breathe dust.



S23 Do not breathe spray/vapour.  
S24 Avoid contact with skin.  
S25 Avoid contact with eyes.  
S38 In case of insufficient ventilation, wear suitable respiratory equipment.  
S51 Use only in well ventilated areas.

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## **16. Other Informations**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

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