



MATERIAL SAFETY DATA SHEETS

343

Lead azide

1. CHEMICAL IDENTITY

Chemical Name : Lead azide

Chemical Classification: Explosive

Trade Name :

Synonyms: Lead diazide, Lead azide, Lead(2+) azide, RD 1333

Formula : N₆Pb

CAS No: 13424-46-9

UN No: 2291

Regulated Identification

Shipping Name : Lead azide, wetted with not less than 20 **Hazchem Code :** 2Z

Codes / Label : Class 6.1, Explosive

Hazardous Waste ID No : 2, 3 & 4

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
1 Lead azide	13424-46-9	3	
2		4	

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C:

Physical State: Solid

Appearance: Needles or white powder.

Melting Pt °C: ~350 (explosive)

Vapour Pressure @ 35°C mmHg:

Odour:

Vapour Density(Air =1):

Solubility in water at 30°C g/100ml:

Others: Insoluble in NH₄OH; Soluble in acetic acid

Specific Gravity (Water =1): 4.7 g/cm³ (20 C)

pH :

3. FIRE / EXPLOSION HAZARD DATA

Flammability : No

LEL:

Flash Point °C in OC:

TDG Flammability:

UEL:

Flash Point °C in CC:

Autoignition Temperature °C :

Explosion sensitivity to impact: Sensitive to shock

Explosion sensitivity to static Electricity: May explode

Hazardous Combustion Products : When decomposed, toxic gases and fumes (NO_x, Pb) are liberated.

Hazardous Polymerization :

Combustible Liquid: No

Explosive Material: Yes

Corrosive Material No

Flammable Material: No

Oxidiser : No

Others:

Pyrophoric Material: No

Organic Peroxide : No

4. REACTIVITY DATA

Chemical Stability :

Incompatibility with other material :

Reactivity : Mixtures with calcium stearate may explode spontaneously. Prolonged contact with copper, zinc and brass may cause spontaneous explosion.

Hazardous :
Reaction Products

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, Ingestion, Skin and Eyes

Effects of Exposure / Symptoms:

Inhalation & eyes: Highly toxic, may be fatal if inhaled, swallowed or absorbed through skin. Effects of contact or inhalation may be delayed. Skin : Avoid any skin contact. See Inhalation.

Emergency Treatment :

Inhalation: Move victim to fresh air. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth method

Skin: Remove and isolate contaminated clothing and shoes. Remove material from skin immediately. Immediately flush with running water for at least 20 minutes. For minor skin contact, avoid spreading material on unaffected skin.

Eyes: Immediately flush with running water for at least 20 minutes.

Ingestion: Seek medical assistance.

LD50 (oral-rat) mg/kg:		STEL:	
LC50 (rat) mg/kg:		Odour Threshold:	
Permissible Exposure Limit:	0.75 mg/m ³	TLV (ACGIH) :	0.75 (Pb) mg/m ³

NFPA Hazard	Health	Flammability	Reactivity	Special
Signals		1	4	

6. PREVENTIVE MEASURES

Personal Protective Equipment : Dust-proof goggles, face-shields, gloves, overalls, dust respirators

Handling : All chemicals should be considered hazardous. Avoid direct physical contact. Use appropriate, approved safety equipment. Untrained individuals should not handle this chemical or its container. Handling should occur in a chemical fume hood.

Storage : Keep in a cool, dry, dark location in a tightly sealed container or cylinder. Keep away from incompatible materials, ignition sources and untrained individuals. Secure and label area. Protect containers/cylinders from physical damage.

Precautions :

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media : Water

Special Procedure : Fire -rescuers should wear self-contained breathing apparatus.

Unusual Hazards :

EXPOSURE: First Aid Measures:

Inhalation: Move victim to fresh air. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth method

Skin: Remove and isolate contaminated clothing and shoes. Remove material from skin immediately. Immediately flush with running water for at least 20 minutes. For minor skin contact, avoid spreading material on unaffected skin.

Eyes: Immediately flush with running water for at least 20 minutes.

Ingestion: Seek medical assistance.

Antidotes / Dosages: Penicillamine, Ca-EDTA

SPILLS :

Steps To Be Taken : Dust is explosive. Surfaces may be washed with water.

Waste Disposal Method: Sealed container for eventual disposal.

8. ADDITIONAL INFORMATION / REFERENCES

Lead azide is used as primer in explosives.

9. MANUFACTURERS / SUPPLIERS DATA

NAME OF FIRM :	Contact person
MAILING ADDRESS :	in Emergency :
TELEPHONE / TELEX NOS :	Local Bodies involved :
TELEGRAPHIC ADDRESS :	Standard Packing :
OTHERS :	Trem Card Details / Ref :

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