

LTS RESEARCH LABORATORIES, INC.
MATERIAL SAFETY DATA SHEET
TANTALUM-ALUMINUM ALLOY

GENERAL

MANUFACTURER/SUPPLIER: LTS RESEARCH LABORATORIES, INC.

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1. PRODUCT IDENTIFICATION

PRODUCT NAME: TANATLUM-ALUMINUM
FORMULA: Ta-Al
CAS #:
TANTALUM: 7440-25-7
ALUMINUM: 7429-90-5

2. PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT: N/A
MELTING POINT: N/A
SPECIFIC GRAVITY: N/A
VAPOR DENSITY: N/A
VAPOR PRESSURE: N/A
% VOLATILES: N/A
SOLUBILITY IN H₂O: N/A
DENSITY: N/A
APPEARANCE AND ODOR: GREY METALLIC SOLID, ODORLESS.



3. HAZARD IDENTIFICATION

HAZARDOUS DESIGNATION: N/A
RISK PHRASES: N/A
HMIS RATINGS:
TANTALUM:
HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0
ALUMINUM:
HEALTH: 1
FIRE: 3
REACTIVITY: 2
RESPIRATORY PROTECTION: WHERE AIRBORNE EXPOSURES MAY EXCEED OSHA/ACGIH PERMISSIBLE AIR CONCENTRATIONS, THE MINIMUM RESPIRATORY PROTECTION RECOMMENDED IS NEGATIVE PRESSURE AIR PURIFYING RESPIRATOR WITH CARTRIDGES THAT ARE NIOSH/MSHA APPROVED AGAINST DUST, FUMES AND MISTS HAVING A TWA LESS THAN 0.05mg/m³
PROTECTIVE GLOVES: RUBBER FOR CHEMICAL TREATMENT; HIGH TEMPERATURE FOR MELTING.
EYE/FACE PROTECTION: SAFETY GLASSES RECOMMENDED FOR EXPOSURES THAT EXCEED PERMISSIBLE AIR CONCENTRATIONS. ALL

CONTAMINATED CLOTHING SHOULD BE REMOVED
BEFORE LEAVING PLANT PREMISES

4. FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED): N/A
AUTOIGNITION TEMPERATURE: N/A
FLAMMABLE LIMITS:
 UPPER : N/A
 LOWER: N/A
AUTOIGNITION TEMPERATURE: N/A
EXTINGUISHING MEDIA: SPECIAL POWDER FOR METAL FLAMES. DO NOT USE WATER.

SPECIAL FIRE FIGHTING PROCEDURES: FIREFIGHTERS MUST WEAR FULL FACE, SELF-CONTAINED BREATHING APPARATUS WITH FULL PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. FUMES FROM FIRE ARE HAZARDOUS. ISOLATE RUNOFF TO PREVENT ENVIRONMENTAL POLLUTION

SPECIAL HAZARDS: IN CASE OF FIRE, METAL OXIDE FUMES MAY BE RELEASED.

5. HEALTH HAZARD INFORMATION

TANTALUM:
 ACUTE EFFECTS:
 EYE: IRRITANT EFFECT
 SKIN: IRRITANT EFFECT
 CHRONIC EFFECTS: TANTALUM DUST HAS CAUSED TRANSIENT INFLAMMATORY LESIONS IN THE LUNGS OF ANIMALS.

ALUMINUM:
 ACUTE EFFECTS:
 EYE: IRRITANT EFFECT. EYE CONTACT WITH ALUMINUM PARTICLES MAY CAUSE CORNEAL NECROSIS.
 SKIN: IRRITANT EFFECT
 CHRONIC EFFECTS: INHALATION OF FINELY DIVIDED POWDER HAS BEEN REPORTED AS A CAUSE OF PULMONARY FIBROSIS. ALUMINUM IN AEROSOLS HAS BEEN IMPLICATED IN ALZHEIMER'S DISEASE.

6. STABILITY

STABILITY: STABLE
CONDITIONS TO AVOID: MOISTURE, EXCESSIVE HEAT
MATERIALS TO AVOID: OXIDIZING AGENTS, HALOGENS, INTERHALOGENS, BASES
DANGEROUS REACTIONS: NONE KNOWN
HAZARDOUS
DECOMPOSITION PRODUCTS: METAL OXIDE FUMES

7. EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: REMOVE VICTIM TO FRESH AIR AND GET MEDICAL ATTENTION
INGESTION: SEEK IMMEDIATE MEDICAL ATTENTION NEVER INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
SKIN: WASH WELL WITH SOAP AND WATER AND RINSE THOROUGHLY. SEEK MEDICAL ADVICE

EYE: FLUSH EYES WITH RUNNING WATER TO CLEAN PARTICLES, LIFTING UPPER AND LOWER EYELIDS, FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION.

8. HANDLING AND STORAGE

HANDLING: KEEP CONTAINER TIGHTLY SEALED. STORE IN COOL, DRY PLACE IN TIGHTLY CLOSED CONTAINERS. ENSURE GOOD VENTILATION.

STORAGE: NO SPECIAL REQUIREMENTS.

9. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: KEEP DUST TO MINIMUM BY ANY MEANS. VACUUMING IS CHOICE FOR DUST USE AN APPROPRIATE NIOSH APPROVED RESPIRATOR. DO NOT USE COMPRESSED AIR FOR CLEANING.

WASTE DISPOSAL METHOD: DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS

10. TOXICITY

EXPERIMENTAL TOXICOLOGY:

TANTALUM: TUMORIGENIC EFFECTS OF TANTALUM HAVE BEEN OBSERVED ON TESTS WITH LABORATORY ANIMALS.

ALUMINUM - THE REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) REPORTS THE FOLLINW EFFECTS OF ALUMINUM IN LABORATORY ANIMALS: REPRODUCTIVE – EFFECTS ON NEWBORN: NEHAVIORAL, PHYSICAL, AND OTHER POSTNATAL MEASURES OR EFFECTS

ADDITIONAL INFORMATION: TO THE BEST OF OUR KNOWLEDGE THE ACUTE AND CHRONIC TOXICITY OF THIS SUBSTANCE IS NOT FULLY KNOWN.

CARCINOGENICITY:

TANTALUM: THE RTECS CONTAINS TUMORIGENIC AND/OR CARCINOGENIC AND/OR NEOPLASTIC DATA FOR COMPONENTS IN THIS PRODUCT.

ALUIMINUM: NO CLASSIFICATION DATA ON CARCINOGENIC PROPERTIES OF THIS MATERIAL IS AVAILABLE.

11. TRANSPORTATION DATA

DOT REGULATIONS: NOT A HAZARDOUS MATERIAL FOR TRANSPORTATION

UN IDENTIFICATION: NONE

HAZARD CLASS: NONE

ADR//RID CLASS: NONE

IMDG CLASS: NONE

AIR TRAN. ICAO/IATA CLASS: NONE

MARITIME TRAN. IMDG CLASS: NONE

12. OTHER INFORMATION

THIS SAFETY DATA SHEET SHOULD BE USED IN CONJUNCTION WITH TECHNICAL SHEETS. IT DOES NOT REPLACE THEM. THE INFORMATION GIVEN IS BASED ON OUR KNOWLEDGE OF THIS PRODUCT, AT THE TIME OF PUBLICATION. IT IS GIVEN IN GOOD FAITH. THE ATTENTION OF THE USER IS DRAWN TO THE POSSIBLE RISKS INCURRED BY USING THE PRODUCT FOR ANY OTHER PURPOSE OTHER THAN THAT FOR WHICH IT WAS INTENDED. THIS DOES NOT IN ANY WAY EXCUSE THE USER FROM KNOWING AND APPLYING ALL THE REGULATIONS GOVERNING HIS ACTIVITY. IT IS THE SOLE RESPONSIBILITY OF THE USER TO TAKE ALL PRECAUTIONS REQUIRED

IN HANDLING THE PRODUCT. THE AIM OF THE MANDATORY REGULATIONS MENTIONED IS TO HELP THE USER TO FULFILL HIS OBLIGATIONS REGARDING THE USE OF HAZARDOUS PRODUCTS.