

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

TJET Thermite Lance Composition

Pyrotechnic as a key component in TJET Thermite Lance. The material is solely designed to be used when assembled in a TJET body.

Manufactured by Kareem Services Ltd, Warminster, BA12 0JN, UK

Chemical Telephone Emergency +44(0)1985-850807

SECTION 2. HAZARD IDENTIFICATION

Classification of Substance:

Suspected Carcinogen (Category 2)

Eye Irritation (Category 2)

Target Organ Systemic Toxicity, Single Exposure (Category 3)

GHS Label Elements



Signal Word DANGER WARNING

Hazard Statement(s):

H351 Suspected of causing cancer via inhalation when burning

H319 Causes serious eye irritation

H335 May cause respiratory irritation

Other Hazards

This product does not contain any PBT or vPvB substances

Precautionary Statement(s):

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P280 Wear protective gloves/face mask and eye protection

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking

P232 Protect from moisture

P402 Store in a dry place

P404 Store in a closed container

P261 Avoid breathing in any dust/fumes/gas etc

P264 Wash thoroughly after handling

P271 Do not use in confined spaces, well ventilated areas only

P501 Dispose of contents in accordance with local/national regulations

P370/378 In case of fire: Use DRY agents only such as sand, earth or other suitable extinguishing agents by gently covering burning powder to smother fire,

P335/P334 If skin in contact with burning powder brush off particles from skin and immerse in cool water and wrap in wet bandages. Seek medical help.

SECTION 3. COMPOSITION, INFORMATION OF INGREDIENTS

Component Name	CAS#	Proportion
Aluminium	7429-90-5	Proprietary

Gypsum	7778-18-9	Proprietary
Cupric Oxide	1317-38-0	Proprietary
Sulphur	7704-34-9	Proprietary
Red Lead	1314-41-6	Proprietary

SECTION 4. FIRST AID MEASURES

Routes of Entry	Emergency First Aid Procedures
INHALATION	Remove affected person to fresh air. If symptoms persist seek medical attention.
SKIN	Remove contaminated clothing and wash with soap and water to remove particles.
EYES	Rinse cautiously with water for several minutes. Remove contact lenses if wearing and continue to rinse.
INGESTION	Give large amounts of water and seek medical attention.
MEDICAL TREATMENT FOR BURNS	Affected areas should be treated as thermal and not chemical burns. Affected areas are likely to be heavily contaminated with metal and metal oxide particulates. Seek medical attention.

SECTION 5 FIRE FIGHTING MEASURES

Fire and Explosion Hazard:

DO NOT LIGHT FIRES. Once TJET is ignited the chemical reaction cannot be halted. Evacuate the area, protect surroundings and allow the TJET to burn itself out.

Material is highly flammable if in the presence of sparks or flames. Keep TJET protected until point of operation.

Water will act as an accelerant to burning powder.

Extinguishing Media:

If possible smother burning powder with sand or other dry non-combustible substance if life is at risk otherwise the speed of the burn is such that there will be an intense heat and shortly thereafter it will die out.

DO NOT USE WATER; DO NOT USE FOAM; or halogenated extinguishers or carbon dioxide.

Wet extinguishing agents hinder the spread of the powder fire and may act as dispersal agent spreading the powder in every direction. Powder must be kept dry.

Specific Hazards:

Material burns fiercely once ignited reaching temperatures in excess of 2250°C. Burning in an enclosed area is likely to increase the severity of the burn.

Special Protective Equipment and Precautions for Firefighters: In general the quantities of TJET Thermite mix are stored in small quantities therefore where possible withdraw to a safe distance and monitor the burn which will be rapid but short and once died down, usually after about 30 secs approach and extinguish with dry extinguishing agents such as sand.

Wear protective eye goggles as the illumination is extreme and can cause fleeting blindness if stared at. Approach fire from upwind to avoid unnecessary inhalation

SECTION 6. ACCIDENTAL RELEASE MEASURES

Small Spill

Isolate powder from any ignition sources and wipe up contaminated area and dispose of as contaminated hazardous waste.

Large Spill

Isolate from ignition sources. Use sufficient desensitizing agent. Collect the material as as in small section.

Environmental Precautions:

Prevent entry into sewers and public waterways. Notify authorities nif material enters sewers or public waterways.

SECTION 7. HANDLING AND STORAGE

Handling and use of TJET should be restricted to trained personnel only. Do not open TJET packages until ready to deploy the devices. Exposure to humidity should be avoided as this has a negative effect on the device.

SMOKING SHOULD NOT BE PERMITTED WHILST PREPARING AND OPERATING TJET

Accumulation of powder must be prevented and work areas must be kept clean.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT		When constructing TJET operators should wear nitrile gloves and face masks as issued with the kit. Cotton Long sleeved shirts and trousers are recommended			
GLOVES	Nitrile Gloves	EYE PROTECTION	Goggles if working in a confined environment	PROTECTIVE CLOTHING	Cotton long sleeved shirt and trousers Face mask
VENTILATION			Only construct TJET in a well ventilated area to prevent dust build up		
RESPIRATORY PROTECTION			Use a face mask.		
OTHER			Safety eyebath nearby in the event of dust in the eyes and source of clean water.		
WORK AND HYGENE PRACTICES			TJET must only be constructed and deployed in a supervised environment		

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Fine metal and metaloxide powder
Odour	Metallic
Specific Gravity (water=1)	3-6
Bulk Density	Varies
Boiling Point	Not applicable
Freezing point	Not applicable
Viscosity	Not applicable
Ph@ 25°C	Not applicable
Vapour Density	Not applicable
Evaporation Rate	Negligible
% Volatile	Negligible

Particle size	≥1 micron		
Decomposition Temp	Not applicable		
Desensitizing Agent	Isoropyl alcohol, acetone or hexanes		
SECTION 10. STABILITY AND REACTIVITY DATA			
Chemical Stability			
This product is stable if handled properly. Avoid the conditions below. Keep packaged until deployment for operations, Keep dry, avoid moisture which will affect sensitivity and effectiveness.			
Conditions to Avoid:			
High temperature, open flame and physicalm or chemical contamination. Moisture and high humidity.			
Incompatible Materials:			
Acids and acid chlorides, halogens, oxidizing agents, moist air and water.			
Hazardous Decomposition or Byproducts:			
Decomposition will not occur if handled and stored properly. In case of fire, oxides of carbon and metals, hydrocarbon, fumes and smoke may be produced.			
Hazardous Polymerization:			
This will not occur.			
Desensitizing Agent:			
Isopropyl alcohol, acetone or hexanes can be used to reduce the heat shock, pressure and any electrostatic discharge sensitivity of the powder			
SECTION 11. TOXOLOGICAL INFORMATION			
Acute Effects	NA	ORL-RAT LD50:	NA
Chronic Effects	NA	IHL-RAT LC50:	NA
Target Organs	NA	SKN-RBT ID50:	NA
SECTION 12. ECOLOGICAL INFORMATION			
Prevent from entering darins sewers or waterways			
SECTION 13. DISPOSAL CONSIDERATIONS			
Review and comply with any and all local and national regulations before proceeding.			
SECTION 14. TRANSPORT INFORMATION			
UN3178 UN HAZMAT CLASS 4.1 FLAMMABLE SOLID. Inorganic,n.o.s. (Thermite) PGII			
SECTION 15. REGULATORY INFORMATION			
None			
SECTION 16. OTHER INFORMATION			
Original MSDS 12/02/2013			
Revision in SDS format 06/05/2020			