

# THERMIT CRUCIBLE THIMBLE AUTOMATIC SYSTEM ATT-ELITE

Chemwatch Material Safety Data Sheet

Issue Date: 14-Mar-2008

NC317ECP

CHEMWATCH 41927

Version No:4

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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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### PRODUCT NAME

THERMIT CRUCIBLE THIMBLE AUTOMATIC SYSTEM ATT-ELITE

### SYNONYMS

"automatic thimble system Thermit universal outlet"

### PRODUCT USE

Enables tapping of the Thermit crucible when molten metal charge is ready to be run into the fusion weld area. Used for railway line joins. One thimble set is consumed per weld.

### SUPPLIER

Company: Thermit Australia Pty Ltd

Address:

170 Somersby Falls Road

Somersby

NSW, 2250

AUS

Telephone: +61 2 4340 4988

Emergency Tel: +61 2 4340 4988 BH

Emergency Tel: +61 2 9639 2486 AH

Fax: +61 2 4340 4004

Company: Thermit Australia Pty Ltd

Address:

PO Box 76

Kariong

NSW, 2250

AUS

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## Section 2 - HAZARDS IDENTIFICATION

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### STATEMENT OF HAZARDOUS NATURE

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

### POISONS SCHEDULE

None

### RISK

None under normal operating conditions.

### SAFETY

None under normal operating conditions.

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## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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NAME	CAS RN	%
Thimble body and seal with refractory sand as graded sand	14808-60-7.	10-30

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## Section 4 - FIRST AID MEASURES

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### SWALLOWED

Not considered a normal route of entry.

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre

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Section 4 - FIRST AID MEASURES

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or a doctor.

## EYE

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- If pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

## SKIN

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

## INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

## NOTES TO PHYSICIAN

Treat symptomatically.

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## Section 5 - FIRE FIGHTING MEASURES

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### EXTINGUISHING MEDIA

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

### FIRE FIGHTING

- Use water delivered as a fine spray to control fire and cool adjacent area.
- Do not approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

### FIRE/EXPLOSION HAZARD

- Non combustible.
- Not considered a significant fire risk, however containers may burn.

### FIRE INCOMPATIBILITY

No known incompatibility with normal range of industrial materials.

**HAZCHEM: None**

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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### EMERGENCY PROCEDURES

#### MINOR SPILLS

- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Wear impervious gloves and safety glasses.
- Use dry clean up procedures and avoid generating dust.
- Vacuum up (consider explosion-proof machines designed to be grounded during storage and

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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use).

- Do NOT use air hoses for cleaning
- Place spilled material in clean, dry, sealable, labelled container.

### MAJOR SPILLS

- Clean up all spills immediately.
- Secure load if safe to do so.
- Bundle/collect recoverable product.
- Collect remaining material in containers with covers for disposal.

**Personal Protective Equipment advice is contained in Section 8 of the MSDS.**

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## Section 7 - HANDLING AND STORAGE

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### PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- When handling DO NOT eat, drink or smoke.
- Always wash hands with soap and water after handling.
- Avoid physical damage to containers.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.

### SUITABLE CONTAINER

Packaging as recommended by manufacturer.

### STORAGE INCOMPATIBILITY

No known incompatibility with normal range of industrial materials.

### STORAGE REQUIREMENTS

- Keep dry.
  - Store under cover.
  - Protect containers against physical damage.
  - Observe manufacturer's storing and handling recommendations.
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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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### EXPOSURE CONTROLS

The following materials had no OELs on our records

- graded sand: CAS:14808- 60- 7

### MATERIAL DATA

Not available. Refer to individual constituents.

### INGREDIENT DATA

GRADED SAND:

NOTE: This product contains negligible amount of respirable dust.

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### PERSONAL PROTECTION

#### EYE

- Safety glasses with side shields
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

For most open welding/brazing operations, goggles, even with appropriate filters, will not afford sufficient facial protection for operators. Where possible use welding helmets or handshields corresponding to AS 1336 and AS 1338 which provide the maximum possible facial protection from flying particles and fragments. [WRIA-WTIA Technical Note 7].

#### HANDS/FEET

Wear physical protective gloves, eg. leather.  
Wear safety footwear.

#### OTHER

- Overalls.
- Eyewash unit.

Aprons, sleeves, shoulder covers, leggings or spats of pliable flame resistant leather or other suitable materials may also be required in positions where these areas of the body will encounter hot metal.

#### RESPIRATOR

Protection Factor	Half- Face Respirator	Full- Face Respirator	Powered Air Respirator
10 x ES	P1 Air- line*	- -	PAPR- P1 -
50 x ES	Air- line**	P2	PAPR- P2
100 x ES	-	P3	-
		Air- line*	-
100+ x ES	-	Air- line**	PAPR- P3

\* - Negative pressure demand \*\* - Continuous flow.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

### ENGINEERING CONTROLS

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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### APPEARANCE

Preformed crucible thimbles/plugs with sealing refractory sand.  
Operates to discharge molten metal either manually or automatically through the high temperature melting seal.  
Refractory sand is off-white powder.  
Insoluble in water.

### PHYSICAL PROPERTIES

Solid.  
Does not mix with water.

Molecular Weight: Not applicable.  
Melting Range (°C): Not available.  
Solubility in water (g/L): Immiscible  
pH (1% solution): Not applicable.  
Volatile Component (%vol): Not applicable.  
Relative Vapour Density (air=1): Not applicable.  
Lower Explosive Limit (%): Not applicable  
Autoignition Temp (°C): Not applicable  
State: Divided solid

Boiling Range (°C): Not available.  
Specific Gravity (water =1): Not Applicable  
pH (as supplied): Not applicable  
Vapour Pressure (kPa): Not applicable.  
Evaporation Rate: Not applicable  
Flash Point (°C): Not applicable

Upper Explosive Limit (%): Not applicable  
Decomposition Temp (°C): Not available.  
Viscosity: Not Applicable

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## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

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### CONDITIONS CONTRIBUTING TO INSTABILITY

Product is considered stable and hazardous polymerisation will not occur.

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## Section 11 - TOXICOLOGICAL INFORMATION

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### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

##### SWALLOWED

Not normally a hazard due to physical form of product.

##### EYE

Not normally a hazard due to physical form of product.  
Generated dust may be discomforting.

##### SKIN

Generated dust may be discomforting.

##### INHALED

Fumes evolved during welding operations may be irritating to the upper-respiratory tract and may be harmful if inhaled.  
Generated dust may be discomforting.

#### CHRONIC HEALTH EFFECTS

Principal routes of exposure are usually by inhalation of dust from the thimble sealing sand and metal fumes from the welding process.

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## Section 11 - TOXICOLOGICAL INFORMATION

### TOXICITY AND IRRITATION

Not available. Refer to individual constituents.

#### GRADED SAND:

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

No data of toxicological significance identified in literature search.

## Section 12 - ECOLOGICAL INFORMATION

DO NOT discharge into sewer or waterways.

## Section 13 - DISPOSAL CONSIDERATIONS

- Recycle where possible.
- Consult State Land Waste Management Authority for disposal.
- Bury residue and dispose of containers/ packaging in authorised landfill.

## Section 14 - TRANSPORTATION INFORMATION

HAZCHEM: None

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:UN, IATA, IMDG

## Section 15 - REGULATORY INFORMATION

**POISONS SCHEDULE: None**

### REGULATIONS

Thermit Crucible Thimble Automatic System ATT-Elite (CAS: None):

No regulations applicable

graded sand (CAS: 14808-60-7) is found on the following regulatory lists;

- Australia - New South Wales Hazardous Substances Prohibited for Specific Uses
- Australia - New South Wales Hazardous Substances Requiring Health Surveillance
- Australia - South Australia Hazardous Substances Requiring Health Surveillance
- Australia - Tasmania Hazardous Substances Prohibited for Specified Uses
- Australia - Tasmania Hazardous Substances Requiring Health Surveillance
- Australia - Western Australia Hazardous Substances Requiring Health Surveillance
- Australia Exposure Standards
- Australia Hazardous Substances
- Australia Hazardous Substances Requiring Health Surveillance
- Australia High Volume Industrial Chemical List (HVICL)
- Australia Inventory of Chemical Substances (AICS)
- Australia Occupational Health and Safety (Commonwealth Employment) (National Standards) Regulations 1994 - Hazardous Substances Requiring Health Surveillance
- Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6
- IMO Provisional Categorization of Liquid Substances
- International Agency for Research on Cancer (IARC) Carcinogens
- OECD Representative List of High Production Volume (HPV) Chemicals

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## Section 16 - OTHER INFORMATION

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Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:  
[www.chemwatch.net/references](http://www.chemwatch.net/references).

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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