

SAFETY DATA SHEETS

This SDS packet was issued with item:

076316632

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

076316301 076316319 076316327 076316335 076316368 076316376 076316384 076316392 076316426 076316434
076316442 076316459 076316467 076316566 076316574 076316608 076316616 076316624 076316665 076316673
076316681 076316699 076316723 076316731 076316749 076316756 076316780 076316798 076316806 076316814
076316822 076316830 076316855 076316863 076316871 076316889 076316897 076316913 076316921 076316939
076316947 076316954 076316988 076316996 076317002 076317010 076317051 076317069 076317077 076317085
076317127 076317135 076317143 076317150 076317168 076317176 076317200 076317218 076317226 076318000
076318018 076318026 076318034 076318083 076318091 076318109 076318117 076318166 076318174 076318182
076318190 076318208 076318240 076318323 076318554 076318562 076318570 076318588 076318638 076318646
076318653 076318661 076318711 076318729 076318737 076318745 076318752 076318950 076318976 076318984
076319008 076319024 076319032 076319057 076319065 076319073 076319081 076319107 076319123 076319131
076319172 076319180 076319206 076319214 076319222 076319255 076319354 076319362 076319370 076319404
076319412 076319420 076319487 076319495 272474377

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

076319479



MATERIAL SAFETY DATA SHEET

Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +; ULTRACAPS S; SDI ADMIX; SDI SPHERICAL AND NEW ULTRAFINE CAPSULES.

Date / Revised: 5.02.2013

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1. Substance / Preparation and Company name

Product Name: **Permite;** Lojic +; GS-80, GS-80 Spherical; F400; Ultracaps +; Ultracaps S; SDI Admix; SDI Spherical and New Ultrafine. **Capsules.**

Recommended use: For filling of cavitated teeth by dental professionals.

Manufacturer / Supplier

SDI Limited
3-13 Brunsdon Street, Bayswater
Victoria, 3153, Australia

Telephone:

+61 3 8727 7111 (Business hours)

Southern Dental Industries Ltd
Block 8, St Johns Court
Swords Road
Santry, Dublin 9, Ireland

Telephone:

+353 1 886 9577 (Business Hours)

SDI Inc.
729 N.Route 83, Suite 315
Bensenville 60106 IL, USA

Telephone:

630 238 8300 (Business hours)

SDI Brasil Indústria e Comércio Ltda
Rua Dr. Virgílio de Carvalho Pinto, 612
Pinheiros, São Paulo, 05415-020
Brasil

Telephone:

+55 11 3092 7100 (Business Hours)

Emergency contact number: +61 3 8727 7111

2. Composition / Information on ingredients

Capsules

| <u>Hazardous ingredients:</u> | <u>Wt. %</u> | <u>CAS No.</u> | <u>EC No.</u> | <u>Index No.</u> |
|--|--------------|----------------|---------------|------------------|
| Mercury, metallic (40-50% of total product) | 100 | 7439-97-6 | 231-106-7 | 080-001-00 |



MATERIAL SAFETY DATA SHEET

Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
ULTRACAPS S; SDI ADMIX; SDI SPHERICAL AND NEW ULTRAFINE
CAPSULES.

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3. Hazard Identification:

These products contain mercury. It is toxic if inhaled and acute exposure may cause allergic reactions including dermatitis, digestion and respiratory disorders.

California Prop 65 Warning

This product contains mercury, a chemical known to the State of California to cause birth defects or other reproductive harm.

Classification according to Directive 790/2009/EC:

| | | |
|-----------------|-----------------|---|
| | T+ | Very toxic |
| | N | Dangerous for the environment |
| Risk phrases: | 61 | May cause harm to the unborn child |
| | 26 | Very toxic by inhalation |
| | 48/23 | Toxic: danger of serious damage to health by prolonged exposure through inhalation. |
| | 50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| Safety phrases: | 45 | In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). |
| | 53 | Avoid exposure - obtain special instructions before use. |
| | 60 | This material and its container must be disposed of as hazardous waste. |
| | 61 | Avoid release to the environment. Refer to special instructions/Safety Data Sheet. |
| | 1/2 | Keep locked up and out of reach of children |
| | 7 | Keep container tightly closed. |
| | 9 | Keep container in a well ventilated place. |
| | 36/37/39 | Wear suitable protective clothing, gloves and eye/face protection. |

4. First Aid Measures

| | |
|-----------------------|--|
| General advice: | Contains metallic mercury. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible). |
| If inhaled: | Very toxic by inhalation. Remove to fresh air. Seek medical attention. If not breathing give artificial respiration. May cause respiratory disorders including inflammation and fluid retention. Inhalation of mercury vapours at high concentration can cause dyspnea, coughing, fever, severe nausea, vomiting, excess salivation, kidney damage with renal shutdown. |
| If ingested: | Call a physician immediately. Give large amounts of water. |
| On skin contact: | Wash skin with soap and water. Remove contaminated clothing. May cause irritation and allergic reaction. |
| On contact with eyes: | Wash with clear, tepid water. If irritation persists, obtain medical attention. May cause irritation and allergic reaction. |



MATERIAL SAFETY DATA SHEET

Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +; ULTRACAPS S; SDI ADMIX; SDI SPHERICAL AND NEW ULTRAFINE CAPSULES.

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5. Fire Fighting Measures

- Suitable extinguishing media: As for adjacent fire. Avoid direct water stream. Do not allow water runoff to enter sewers and waterways. Remove product from the fire area if this can be done without risk.
- Special protective equipment: In fires involving large quantities of product, use self-contained breathing apparatus and full protective clothing.
- Further information: Hazardous decomposition products may be produced. (Sec. 10).

6. Accidental Release Measures

- Spillages: Mercury presents a health hazard if incorrectly handled, and is dangerous for the environment. Spillages of mercury should be removed immediately, including from places which are difficult to access. Wearing protective clothing, use a plastic syringe to draw it up. Smaller quantities can be covered by sulphur powder and removed. Avoid inhalation of the vapour.
- Personal precautions: Wear appropriate MSHA approved respirator, gloves, safety goggles and protective clothing to prevent skin contact and inhalation.
- Environmental precautions: Prevent any spillage from entering drains or waterways.
- Methods for cleaning up: Avoid contact with skin and eyes, and avoid inhalation. Pick up with dust pan or method that does not break up mercury into smaller droplets, etc. Store in a sealed plastic container, away from heat and flame, until disposal via an approved Recycler and according to local regulations.

7. Handling and storage

Handling

Do not breathe powder and avoid exposed mercury surfaces. Wear appropriate gloves, goggles/face protection and protective clothing to prevent skin contact. Wash thoroughly after handling. Keep away from food, drink and around animal feed stuffs.

Storage

Keep container tightly closed and dry. Storage in large quantities (as in warehouse) should be in a ventilated, cool area. Do not store in metal containers. Keep away from sources of ignition and elevated temperatures, recommended <25°C.

Distribution

During distribution, to our customers, this product can be transported in non-refrigerated conditions between 15° to 25° C. This product can also withstand temperatures up to 40° C for short periods (2 to 3 days) and intermittent peaks up to 50°C.

**MATERIAL SAFETY DATA SHEET**

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Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +; ULTRACAPS S; SDI ADMIX; SDI SPHERICAL AND NEW ULTRAFINE CAPSULES.**Date / Revised: 5.02.2013****Revision: 11**

8. Exposure controls and personal protection

8-Hour TWAs: Mercury - 0.025 mg/m³ (Skin) (ACGIH); 0.05 mg/m³ (Skin) (OSHA/UK & NOHSC/Australia); 0.1 mg/m³ (Short term) (Germany);
Silver - 0.01 mg/m³ (OSHA/Germany); 0.1 mg/m³ (ACGIH/U.K. & NOHSC/Australia)
Tin - 2 mg/m³ (OSHA/ACGIH/Germany & NOHSC/Australia); 5 mg/m³ (U.K.);
Copper - 1 mg/m³ (OSHA/ACGIH/Germany/UK & NOHSC/Australia)
Indium - 0.1 mg/m³ (OSHA/UK & NOHSC/Australia)

Zinc - 1 mg/m³ (ACGIH)

These levels are not anticipated under foreseeable use conditions.

Personal protective equipment

Respiratory equipment: None required under normal use conditions.

Hand protection: Impervious gloves.

Eye protection: Safety goggles.

General safety and hygiene measures: Use only as directed. Wash hands after use.

9. Physical and chemical properties

Form and Colour: Silver alloy powder and mercury in separate compartments of a plastic capsule.

| | |
|--|----------------------------------|
| Odour: | Odourless |
| Melting point / melting range: | (Mercury): -38.9°C |
| Boiling point / boiling range: | (Mercury): 356.6°C |
| Flash point: | Not applicable |
| Explosion limits: | Not applicable |
| Ignition temperature: | Not applicable |
| Vapour pressure: | (Mercury) 0.0012 mmHg at 20°C |
| Specific Gravity: | (Mercury) 13.6 g/cm ³ |
| % Volatiles: | Not applicable |
| Solubility in water: | Insoluble |
| Solubility in other solvents: | Insoluble in alcohol |
| pH value: | Not available |
| Octanol / water partition coefficient (log POW): | Not determined |
| Viscosity: | Not determined |
| Other information: | N/A |



MATERIAL SAFETY DATA SHEET

Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
ULTRACAPS S; SDI ADMIX; SDI SPHERICAL AND NEW ULTRAFINE
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10. Stability and Reactivity

Thermal decomposition: No decomposition under normal conditions

Substance(s) to avoid: Strong oxidizers

Hazardous reactions: Mixtures of mercury with acetylene, ammonia, chlorine dioxide, methyl azide, chlorates, nitrates, or hot sulfuric acid can be explosive. Readily amalgamates with most metals.

Hazardous decomposition products: Slightly volatile at room temperature, atmospheric pressure. When exposed to high temperatures, mercury vaporizes to extremely toxic fumes.

11. Toxicological information

Critical hazards to man: Very toxic by inhalation. Toxic - danger of serious damage to health by prolonged exposure through inhalation. Acute exposure may cause allergic reactions including dermatitis, digestion and respiratory disorders. May cause harm to the unborn child..

Critical hazards to the environment: Dangerous for the environment.

None available regarding product. Some information supplied for ingredient(s).

LCLo / Inhalation / Rabbit: (Mercury) 29 mg/m³/30 Hour

Chronic Health Effects: Inhalation of mercury vapours, dusts or organic vapours, or skin absorption or mercury over long periods can cause mercurialism. Symptoms include tremors, inflammation of mouth and gums, excessive salivation, stomatitis, blue lines on gums, pain and numbness in extremities, weight loss, mental depression, and nervousness. Exposure may aggravate kidney disorders, chronic respiratory disease and nervous system disorders.

Alloy powder and mercury are in pre-dosed capsules, so the danger of exposure to mercury vapours is low.

12. Ecological information

German "Wassergefährdungs Klasse (WGK):3

This product must not enter effluent, ground water, surface water or the soil.



MATERIAL SAFETY DATA SHEET

Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
ULTRACAPS S; SDI ADMIX; SDI SPHERICAL AND NEW ULTRAFINE.
CAPSULES.

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13. Disposal considerations

Product: Dispose of in accordance with local regulations.

The 1991 Environmental Protection (Duty of Care) Regulations SI No. 2839 and amendments should be noted (United Kingdom).

14. Transport information

IATA and IMDG:

Product: Amalgam Capsule

Contains: Mercury

Proper Shipping Name: Mercury contained in manufactured articles

UN Number: UN 3506

Packing Group: III

Class (sub risk): 8 (6.1) Corrosive & Toxic

IATA Limits: EQ - E0 (not permitted as excepted quantity)

LQ - Forbidden for passenger and cargo aircraft

CAO - no limit

PAX - no limit

IMDG Limits: LQ -5kg

EQ - E0 (not permitted as excepted quantity)

ADR/RID Class: UN 2809

Shipping name: Mercury

Class: 8

Packing Group: III

LQ - 5 kg

15. Regulatory information

These products are regulated by:

TGA

Medical Devices Directives 93/42/EEC

FDA

National regulations

**MATERIAL SAFETY DATA SHEET**

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Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
ULTRACAPS S; SDI ADMIX; SDI SPHERICAL AND NEW ULTRAFINE.
CAPSULES.

Date / Revised: 5.02.2013

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16. Other information**Preparation of MSDS:**

Prepared by: SDI Limited
3-13 Brunsdon Street, Bayswater
Victoria, 3153, Australia

Phone Number:
+61 3 8727 7111

The information contained in the Material Safety Data Sheet is based on data considered to be accurate, however, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof.

Department issuing MSDS: Research and Development
Contact: R&D Director



SAFETY DATA SHEET

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Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
ULTRACAPS S; SDI ADMIX; SDI SPHERICAL & NEW ULTRAFINE CAPSULES.

Date / Revised: 25.06.2015

Revision: 15

1. Identification of the substance/mixture and of the Company/undertaking:

1.1 Product identifier:

Product Name: Permite; Lojic +; GS-80, GS-80 Spherical; F400; Ultracaps +;
Ultracaps S; SDI Admix; SDI Spherical and New Ultrafine.
- Capsules.

1.2 Relevant identified use:

Relevant use:

Dental professional use: For filling of cavitated teeth by dental professionals.

1.3 Details of the supplier of the Safety Data Sheet:

Manufacturer / Supplier

SDI Limited
3-13 Brunson Street, Bayswater
Victoria, 3153, Australia

SDI (North America) Inc.
1279 Hamilton Parkway
Itasca, IL 60143, USA

Telephone:

+61 3 8727 7111 (Business hours)

Telephone:

+1 630 361 9200 (Business hours)

Southern Dental Industries Ltd
Block 8, St Johns Court
Swords Road
Santry, Dublin 9, Ireland

SDI Brasil Indústria e Comércio Ltda
Rua Dr. Virgílio de Carvalho Pinto, 612
Pinheiros, São Paulo, 05415-020
Brasil

Telephone:

+353 1 886 9577 (Business Hours)

Telephone:

+55 11 3092 7100 (Business Hours)

Emergency contact number: +61 3 8727 7111

Email: ray.cahill@sdi.com.au (Technical Director, SDI Limited)

2. Hazard Identification

Classification of the substance/mixture:

SIGNAL WORD: DANGER



**SAFETY DATA SHEET**

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**Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
ULTRACAPS S; SDI ADMIX; SDI SPHERICAL & NEW ULTRAFINE CAPSULES.****Date / Revised: 25.06.2015****Revision: 15****2. Hazard Identification..continued**

These products contain mercury. It is toxic if inhaled and acute exposure may cause allergic reactions including dermatitis, digestion and respiratory disorders.

California Prop 65 Warning

This product contains mercury, a chemical known to the State of California to cause birth defects or other reproductive harm.

GHS Classification:

Acute Tox. 2

Repr. 1B

STOT RE 1

Aquatic Acute 1

Aquatic Chronic 1

Materials are contained in two compartments. However, under normal conditions of use, contact with these materials by the user is generally not expected.

Hazard statement(s)

H330

Fatal if inhaled.

H360D

May damage the unborn child.

H372

Causes damage to organs through prolonged or repeated exposure.

H400

Very toxic to aquatic life.

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statement(s):

Prevention:

P201

Obtain special instructions before use.

P202

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

P260

Do not breathe fumes/vapours.

P264

Wash hands thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P271

Use only outdoors or in a well-ventilated area.

P284

Wear respiratory protection.

P280

Wear protective gloves/clothing.

P281

Use personal protective equipment as required.

Response:

P304+P340:

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310

Immediately call a POISON CENTRE or doctor/physician.

P320

Specific treatment is urgent- refer to first aid instructions Section 4.

P308+P313

IF exposed or concerned: Get medical advice/attention.

P301+P310

IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.

P321

Specific treatment, refer to First Aid instructions Section 4.

P330

Rinse mouth.

P363

Wash contaminated clothing before re-use.

Storage:

P405

Store locked up.

Disposal

P501

Dispose of contents/ container to an approved waste disposal plant.



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Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
ULTRACAPS S; SDI ADMIX; SDI SPHERICAL & NEW ULTRAFINE CAPSULES.

Date / Revised: 25.06.2015

Revision: 15

3. Composition / Information on ingredients

Capsules

| <u>Hazardous ingredients:</u> | <u>Wt. %</u> | <u>CAS No.</u> | <u>EC No.</u> | <u>Index No.</u> |
|--|--------------|----------------|---------------|------------------|
| Mercury, metallic (40-50% of total product) | 100 | 7439-97-6 | 231-106-7 | 080-001-00 |

Hazard class: Acute Tox. 2, Repr 1B, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1.

Hazard statement codes: H330, H360D, H372, H400, H410.

4. First Aid Measures

| | |
|-----------------------|--|
| General advice: | Contains metallic mercury. In case of accident or if you feel unwell, seek medical advice immediately (show label and instructions for use where possible). |
| If inhaled: | Very toxic by inhalation. Remove to fresh air. Seek medical attention. If not breathing give artificial respiration. May cause respiratory disorders including inflammation and fluid retention. Inhalation of mercury vapours at high concentration can cause dyspnea, coughing, fever, severe nausea, vomiting, excess salivation, kidney damage with renal shutdown. |
| If ingested: | Call a physician immediately. Rinse mouth and give large amounts of water. |
| On skin contact: | Wash skin with soap and water. Remove contaminated clothing. May cause irritation and allergic reaction. If irritation develops, if feeling unwell, or if concerned, get medical advice/attention. |
| On contact with eyes: | Do not let victim rub eyes or keep them closed. Extensive irrigation with tepid water is required (at least 15 minutes). Obtain medical advice if irritation persists. May cause irritation and allergic reaction. If irritation develops, if feeling unwell, or if concerned, get medical advice/attention. |

Most important effects, acute and delayed:

The most important known symptoms and effects are described in section 2 and/or in section 11.

Indication of any immediate medical attention and special treatment needed: No data available.

5. Fire Fighting Measures

| | |
|-------------------------------------|---|
| Suitable extinguishing media: | As for adjacent fire. Water spray, Foam, Carbon Dioxide, dry Chemical and other "ABC" Class may be used. |
| Special protective equipment: | In fires involving large quantities of product, use self-contained breathing apparatus and full protective equipment. |
| Unusual Fire and Explosion Hazards: | Mercury is not flammable and is relatively stable although it can react with many metals to form amalgams. |



SAFETY DATA SHEET

Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
ULTRACAPS S; SDI ADMIX; SDI SPHERICAL & NEW ULTRAFINE CAPSULES.

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5. Fire Fighting Measures

Explosion Sensitivity to Mechanical Impact: Not sensitive.

Explosion Sensitivity to Static Discharge: Not sensitive.

Unsuitable extinguishing media: None specified.

Specific hazards arising from the mixture:

Mercury vapours generated during fires involving these products are toxic; additionally, this element can be irritating to contaminated tissue. Therefore, this product presents a severe health hazard to firefighters.

Advice for firefighters:

Wear self contained breathing apparatus and full protective equipment.

Move fire exposed containers, if it can be done without risk to firefighters.

Apply cooling water to sides of containers that are exposed to flame until well after fire is out.

Decontaminate all equipment thoroughly after the conclusion of fire-fighting activities. If possible, prevent run-off water from entering storm drains, bodies of water, or other environmentally sensitive areas.

Further information:

Hazardous decomposition products may be produced. (Refer to Section 10).

6. Accidental Release Measures

Spillages:

Mercury presents a health hazard if incorrectly handled, and is dangerous for the environment. Spillages of mercury should be removed immediately, including from places which are difficult to access.

Wearing protective clothing, use a plastic syringe to draw it up.

Smaller quantities can be covered by sulphur powder and removed.

Avoid inhalation of the vapour.

Personal precautions:

Wear appropriate MSHA approved respirator, gloves, safety goggles and protective clothing to prevent skin contact and inhalation.

Environmental precautions:

Prevent any spillage from entering drains or waterways.

Methods for cleaning and containment of spills:

Avoid contact with skin and eyes, and avoid inhalation. Pick up with dust pan or method that does not break up mercury into smaller droplets, etc. Store in a sealed plastic container, away from heat and flame, until disposal via an approved Recycler and according to local regulations. Ensure adequate ventilation.



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Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
ULTRACAPS S; SDI ADMIX; SDI SPHERICAL & NEW ULTRAFINE CAPSULES.

Date / Revised: 25.06.2015

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7. Handling and storage

| | |
|----------------------|---|
| <u>Handling:</u> | Do not breathe powder and avoid exposed mercury surfaces. Wear appropriate gloves, goggles/face protection and protective clothing to prevent skin contact. Wash thoroughly after handling. Keep away from food, drink and around animal feed stuffs. |
| <u>Storage:</u> | Store only in unopened original containers. Keep container tightly closed and dry. Storage in large quantities (as in warehouse) should be in a ventilated, cool area. Do not store in metal containers. Keep away from sources of ignition and elevated temperatures, recommended <25°C. |
| <u>Distribution:</u> | During distribution, to our customers, this product can be transported in non-refrigerated conditions between 15° to 25° C. This product can also withstand temperatures up to 40° C for short periods (2 to 3 days) and intermittent peaks up to 50°C. |
| Specific end use: | Apart from the use mentioned in section 1.2, there are no other uses for the product. |

8. Exposure controls and personal protection

Control parameters:
Occupational exposure limits:

8-Hour TWAs: Mercury - 0.025 mg/m³ (Skin) (ACGIH); 0.05 mg/m³ (Skin) (OSHA/UK & NOHSC/Australia); 0.1 mg/m³ (Short term) (Germany);
Silver - 0.01 mg/m³ (OSHA/Germany); 0.1 mg/m³ (ACGIH/U.K. & NOHSC/Australia)
Tin - 2 mg/m³ (OSHA/ACGIH/Germany & NOHSC/Australia); 5 mg/m³ (U.K.);
Copper - 1 mg/m³ (OSHA/ACGIH/Germany/UK & NOHSC/Australia)
Indium - 0.1 mg/m³ (OSHA/UK & NOHSC/Australia)
Zinc - 1 mg/m³ (ACGIH)

These levels are not anticipated under foreseeable use conditions.

Personal protective equipment

| | |
|--|--|
| Respiratory equipment: | None required under normal use conditions. |
| Hand protection: | Impervious gloves. |
| Eye protection: | Safety goggles. |
| General safety and hygiene measures: Use only as directed. Wash hands after use. | |

**SAFETY DATA SHEET**

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**Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
ULTRACAPS S; SDI ADMIX; SDI SPHERICAL & NEW ULTRAFINE CAPSULES.****Date / Revised: 25.06.2015****Revision: 15**

9. Physical and chemical properties

| | |
|---|---|
| Form and Colour: | Silver alloy powder and mercury in separate compartments of a plastic capsule. Silver alloy – grey fine metallic powder. Mercury – Silver-white heavy liquid metal. |
| Odour: | Odourless |
| Melting point / melting range: | (Mercury): -38.9°C |
| Boiling point / boiling range: | (Mercury): 356.6°C |
| Flammable: | Not applicable |
| Flash point: | Not applicable |
| Explosion limits: | Not applicable |
| Ignition temperature: | Not applicable |
| Vapour pressure: | (Mercury) 0.0012 mmHg at 20°C |
| Specific Gravity: | (Mercury) 13.6 g/cm ³ |
| % Volatiles: | Not applicable |
| Solubility in water: | Insoluble |
| Solubility in other solvents: | Insoluble in alcohol |
| pH value: | Not applicable. |
| Partition co-efficient (n-octanol/water): | Not determined |
| Viscosity: | Not determined |
| Evaporation rate: | Not determined |
| Relative vapour density (air = 1): | (Mercury): - 6.9 |
| Auto-ignition temperature: | Not available |
| Decomposition temperature: | Not available |
| Explosive Properties: | no data available |

10. Stability and Reactivity

| | |
|-----------------------------------|---|
| Reactivity: | No data available. |
| Chemical Stability: | Stable under recommended storage conditions. |
| Thermal decomposition: | No decomposition under normal conditions |
| Substance(s) to avoid: | Strong oxidizers |
| Hazardous reactions: | Mixtures of mercury with acetylene, ammonia, chlorine dioxide, methyl azide, chlorates, nitrates, or hot sulfuric acid can be explosive. Readily amalgamates with most metals. |
| Hazardous decomposition products: | Slightly volatile at room temperature, atmospheric pressure. When exposed to high temperatures, mercury vaporizes to extremely toxic fumes. |



11. Toxicological information

| | |
|--------------------------------------|---|
| Critical hazards to man: | Very toxic by inhalation. Toxic - danger of serious damage to health by prolonged exposure through inhalation. Acute exposure may cause allergic reactions including dermatitis, digestion and respiratory disorders. May cause harm to the unborn child. |
| Critical hazards to the environment: | Dangerous for the environment. |
| Serious eye damage/irritation: | Irritating to eyes. |
| Skin corrosion/irritation: | May cause allergic skin reactions. May be irritant or corrosive. |
| Respiratory or skin sensitisation: | Very toxic by inhalation. |
| Ingestion: | Very hazardous by ingestion. May cause damage to blood, kidneys, liver, brain, peripheral nervous system, central nervous system. |
| Germ cell mutagenicity: | No data available. |
| Carcinogenicity: | Classified A5 (not suspected for human) by ACGIH. 3 (not classifiable for human) by IARC. |
| None available regarding product. | Some information supplied for ingredient(s). |
| LCLo / Inhalation / Rabbit: | (Mercury) 29 mg/m ³ /30 Hour |
| Chronic Health Effects: | Inhalation of mercury vapours, dusts or organic vapours, or skin absorption or mercury over long periods can cause mercurialism. Symptoms include tremors, inflammation of mouth and gums, excessive salivation, stomatitis, blue lines on gums, pain and numbness in extremities, weight loss, mental depression, and nervousness. Exposure may aggravate kidney disorders, chronic respiratory disease and nervous system disorders. May cause damage to blood, kidneys, liver, brain, peripheral nervous system, central nervous system. |

Alloy powder and mercury are in pre-dosed capsules, so the danger of exposure to mercury vapours is low.

12. Ecological information

German "Wassergefährdungs Klasse (WGK):3

This product must not enter effluent, ground water, surface water or the soil.

| | |
|-----------------------------------|---|
| Self-Assessment: | Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. |
| Ecotoxicity: | No data available. |
| Persistence and biodegradability: | No data available. |
| Bioaccumulative potential: | No data available. |



SAFETY DATA SHEET

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Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
ULTRACAPS S; SDI ADMIX; SDI SPHERICAL & NEW ULTRAFINE CAPSULES.

Date / Revised: 25.06.2015

Revision: 15

12. Ecological information

| | |
|------------------------|---|
| Mobility in soil: | No data available. |
| Other adverse effects: | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |

13. Disposal considerations

Product: Dispose of in accordance with local regulations.

The 1991 Environmental Protection (Duty of Care) Regulations SI No. 2839 and amendments should be noted (United Kingdom).

Contaminated packaging: Dispose of contaminated packaging as hazardous waste in accordance with local official regulations.

14. Transport information

| | |
|-----------------------|---|
| IATA: | |
| Product: | Amalgam Capsule |
| Contains: | Mercury |
| Proper Shipping Name: | Mercury contained in manufactured articles |
| UN Number: | UN 3506 |
| Packing Group: | III |
| Class (sub risk): | 8 (6.1) Corrosive & Toxic |
| IATA Limits: | EQ - E0 (not permitted as excepted quantity) LQ - Forbidden for passenger and cargo aircraft CAO - no limit PAX - no limit |

Not classified as Dangerous Goods for sea, road and rail transport.

15. Regulatory information

These products are regulated by: TGA
Medical Devices Directives 93/42/EEC
FDA
National regulations

16. Other information

| | |
|---|---|
| Prepared by: SDI Limited 3-13 Brunsdon Street, Bayswater Victoria, 3153, Australia | Phone Number: +61 3 8727 7111 |
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**SAFETY DATA SHEET**

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**Product: PERMITE; LOJIC +; GS-80; GS-80 SPHERICAL; F400; ULTRACAPS +;
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16. Other information

The information contained in the Safety Data Sheet is based on data considered to be accurate, however, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof.

Date of preparation/revision: 25 June 2015.**Department issuing SDS:** Research and Development**Contact:** R&D Director
