

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name | SUPERFECT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Synonyms     | 10122 - SUPERFECT CU SPR 0.3% • 10123 - SUPERFECT CU SPR 0.5% • 15705 - GF 0-9-0-11 MO 0.025 • 25650 - SUPERFECT MO 0.025% • 25655 - SUPERFECT MO 0.05% • 30850 - SUPERFECT • 81018 - SUPERFECT MO 0.025% • 81032 - SUPERFECT MO 0.05% • 81121 - SUPERFECT MO 0.015% • 81122 - SUPERFECT CU 0.5% ZN 0.5% • 81124 - SUPERFECT CU 0.5% MO 0.025% • 81126 - SUPERFECT CU 0.5% • 81226 - SUPERFECT CU 0.5% MO 0.015% • 81227 - SUPERFECT CU 0.5% ZN 0.5% MO 0.015% • 81228 - SUPERFECT MO 0.4% CONCENTRATE • 81445 - SUPERFECT CO 0.12% • 81575 - AIR SEEDER SUPERFECT • GF SUPERFECT • GF SUPERPHOSPHATE PRODUCTS • GROW FORCE SUPERFECT • GROW FORCE SUPERPHOSPHATE PRODUCTS • SINGLE SUPERPHOSPHATE • SSP • SUPER • SUPER - PRODUCT CODE |

### 1.2 Uses and uses advised against

|      |                                                                                         |
|------|-----------------------------------------------------------------------------------------|
| Uses | PASTURE FERTILISER • PASTURE FERTILIZER • PHOSPHORUS FERTILISER • PHOSPHORUS FERTILIZER |
|------|-----------------------------------------------------------------------------------------|

### 1.3 Details of the supplier of the product

|               |                                                                                                                                                                             |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supplier name | INCITEC PIVOT LIMITED                                                                                                                                                       |
| Address       | Level 8, 28 Freshwater Place, Southbank, Victoria, 3006, AUSTRALIA                                                                                                          |
| Telephone     | (03) 8695 4400; 1800 009 832                                                                                                                                                |
| Fax           | (03) 8695 4419                                                                                                                                                              |
| Email         | <a href="mailto:ipf.customer.service@incitecpivot.com.au">ipf.customer.service@incitecpivot.com.au</a>                                                                      |
| Website       | <a href="http://www.incitecpivot.com.au">http://www.incitecpivot.com.au</a> ;<br><a href="http://www.incitecpivotfertilisers.com.au">www.incitecpivotfertilisers.com.au</a> |

### 1.4 Emergency telephone numbers

|           |                          |
|-----------|--------------------------|
| Emergency | 1800 033 111 (All Hours) |
|-----------|--------------------------|

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

### 2.2 GHS Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

### 2.3 Other hazards

No information provided.

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

### 3.1 Substances / Mixtures

| Ingredient                 | CAS Number | EC Number | Content |
|----------------------------|------------|-----------|---------|
| CALCIUM SULPHATE DIHYDRATE | 10101-41-4 | 600-148-1 | 60%     |
| SUPERPHOSPHATE             | 8011-76-5  | 232-379-5 | 35%     |
| TRACE ELEMENTS             | -          | -         | <5%     |
| WATER                      | 7732-18-5  | 231-791-2 | <5%     |

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## 4. FIRST AID MEASURES

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### 4.1 Description of first aid measures

|                             |                                                                                                                                                                                                          |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye</b>                  | If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.                 |
| <b>Inhalation</b>           | If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.                                                                                                                |
| <b>Skin</b>                 | If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor. |
| <b>Ingestion</b>            | For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).                                                                                                     |
| <b>First aid facilities</b> | Eye wash facilities should be available.                                                                                                                                                                 |

### 4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

### 4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

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## 5. FIRE FIGHTING MEASURES

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### 5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

### 5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases (phosphorus/ sulphur oxides) when heated to decomposition.

### 5.3 Advice for firefighters

No fire or explosion hazard exists. Toxic gases may be evolved in a fire situation.

### 5.4 Hazchem code

None allocated.

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## 6. ACCIDENTAL RELEASE MEASURES

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### 6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Ventilate area where possible.

### 6.2 Environmental precautions

Prevent product from entering drains and waterways.

### 6.3 Methods of cleaning up

Recover spilt fertiliser as soon as possible.

If in a warehouse and the product has not been contaminated or degraded, return it to the original stockpile. Otherwise, store in a separate bay or containers.

If in the open, and the product cannot be immediately recovered, take steps to protect the product from the elements and loss to waterways. Cover the spilt product with a water-proof tarpaulin, weighed down to prevent it being blown off by wind.

For disposal options, see Section 13.

In agricultural fields, spread any residual fertiliser out over as wide an area as possible. If left too thick, plant growth may be affected. Plants may die, and germination and emergence stifled for some time.

### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

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## 7. HANDLING AND STORAGE

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### 7.1 Precautions for safe handling

Before use, read the product label, including sections on "Safety Directions" and "Care of Equipment". Use safe work practices. Avoid eye or skin contact and dust inhalation. Observe good personal hygiene, including washing hands before eating. When lifting flexible intermediate bulk containers, use properly designed and approved equipment that meets Australian Standards AS3668 and AS2359. Refer to the Incitec Pivot pamphlet "Guidance for the Safe Handling of Fertiliser Bulk Bags".

## 7.2 Conditions for safe storage, including any incompatibilities

Fertilisers should be stored in a cool, dry, covered and well-ventilated area. Do not allow to get wet. Store away from acids; oxidising agents, e.g. hypochlorite; farm chemicals, e.g. insecticides, fungicides and herbicides; and foodstuffs. Bulk fertilisers should be stored in bays or piles physically apart from other products. Concrete floors are recommended. Fertiliser may set in storage, posing a risk of engulfment when being removed from the stockpile. Conduct Risk Assessments, and ensure appropriate equipment, procedures and training are in place. It is generally recommended that fertilisers not be placed in silos, and if they are, only for short periods of time. Refer to the Incitec Pivot "Silo Guidance Notes" for more detail. Ensure stockpiles of bulk bags are stable. Place the bags as close as reasonably practical to each other without causing undue damage. If stacking more than two high, stack in a pyramidal style. Ensure the third and subsequent layers are placed so as to straddle and bind the bags below them. When walking near, or between rows of stacked bags, maintain a distance equal to the height of the stack from the product. Bagged fertilisers should be stored under cover and out of direct sunlight (which degrades woven polypropylene packs). If stored in the open, do so for short periods only, and cover the bags with a tarpaulin. Avoid high stacking as this promotes caking. The Pallet Capacity Rating (design weight) must not be exceeded on the bottom tier. If SuPerfect is to be stored in bulk in the open, e.g. on an airstrip in advance of spreading, locate the dump site on high ground not subject to run-off, and cover with a water-proof tarpaulin, weighed down to prevent it being blown off by wind.

## 7.3 Specific end uses

No information provided.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## 8.1 Control parameters

### Exposure standards

| Ingredient           | Reference      | TWA |                   | STEL |                   |
|----------------------|----------------|-----|-------------------|------|-------------------|
|                      |                | ppm | mg/m <sup>3</sup> | ppm  | mg/m <sup>3</sup> |
| Calcium sulphate     | SWA [Proposed] | --  | 1.5               | --   | --                |
| Calcium sulphate (a) | SWA [AUS]      | --  | 10                | --   | --                |

## Biological limits

No biological limit values have been entered for this product.

## 8.2 Exposure controls

**Engineering controls** Avoid inhalation.

## PPE

The selection of Personal Protective Equipment (PPE) should be based on a Risk Assessment of the amount of dust likely to be generated, including the quantity of product being handled, the presence and amount of fines and dust; the task being performed, the work environment in which it is being undertaken, and the level of exposure. Normal work clothing may suffice during transfer operations in the field, e.g. when filling fertiliser boxes, and in bulk storage facilities where contact with the product is limited under well ventilated conditions and occupational exposure limits are not exceeded.

|                    |                                                                                                                                                                                                                                                                                                                                                         |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye / Face</b>  | Where eye contact may occur, wear safety glasses with side shields.                                                                                                                                                                                                                                                                                     |
| <b>Hands</b>       | Cotton gloves, which can be washed or disposed of if heavily soiled, will suffice under most circumstances. Use impervious PVC or rubber gloves in high risk situations.                                                                                                                                                                                |
| <b>Body</b>        | Where skin contact may occur and for individuals with sensitive skin, wear ankle length and long sleeved clothing or overalls.                                                                                                                                                                                                                          |
| <b>Respiratory</b> | Wear a dust mask where exposure to dust is light. Where the dust nuisance is high and ventilation is inadequate, use a properly fitted particulate filter respirator, either full face-piece or half mask plus goggles, that meets Australian Standards AS/NZS 1715 and AS/NZS 1716 "Selection, use and maintenance of respiratory protective devices". |

Wash dust from hands and exposed skin. In risk situations, locate an eyewash station nearby. Wash contaminated clothing and other protective equipment before storage or reuse. Ensure all PPE conforms to the relevant Australian Standards. Read the labels on the PPE.



# 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

**Appearance** GREY GRANULES

### 9.1 Information on basic physical and chemical properties

|                           |                                          |
|---------------------------|------------------------------------------|
| Odour                     | MILDLY ACIDIC ODOUR                      |
| Flammability              | NON FLAMMABLE                            |
| Flash point               | NOT RELEVANT                             |
| Boiling point             | NOT AVAILABLE                            |
| Melting point             | NOT AVAILABLE                            |
| Evaporation rate          | NOT AVAILABLE                            |
| pH                        | 4.3                                      |
| Vapour density            | NOT AVAILABLE                            |
| Relative density          | 2.3                                      |
| Solubility (water)        | 1.8 g/100 mL (calcium phosphate content) |
| Vapour pressure           | NOT AVAILABLE                            |
| Upper explosion limit     | NOT RELEVANT                             |
| Lower explosion limit     | NOT RELEVANT                             |
| Partition coefficient     | NOT AVAILABLE                            |
| Autoignition temperature  | NOT AVAILABLE                            |
| Decomposition temperature | 203°C                                    |
| Viscosity                 | NOT AVAILABLE                            |
| Explosive properties      | NOT AVAILABLE                            |
| Oxidising properties      | NOT AVAILABLE                            |
| Odour threshold           | NOT AVAILABLE                            |

### 9.2 Other information

|              |                                |
|--------------|--------------------------------|
| Bulk density | 1100 to 1300 kg/m <sup>3</sup> |
|--------------|--------------------------------|

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

### 10.2 Chemical stability

Stable under recommended conditions of storage.

### 10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

### 10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

### 10.5 Incompatible materials

No information provided.

### 10.6 Hazardous decomposition products

May evolve toxic gases (phosphorus/ sulphur oxides) when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity** Based on available data, the classification criteria are not met. This product contains up to 2.5% fluoride (F) as an impurity. Chronic ingestion (e.g. improper or inadvertent use as a dietary phosphorus supplement for ruminants (i.e. cattle and sheep)) may result in fluorosis.

**Information available for the ingredients:**

| Ingredient                 | Oral LD50           | Dermal LD50 | Inhalation LC50 |
|----------------------------|---------------------|-------------|-----------------|
| CALCIUM SULPHATE DIHYDRATE | 3000 mg/kg (rat)    | --          | --              |
| SUPERPHOSPHATE             | 5 g/kg (goat/sheep) | --          | --              |

|                        |                                                                       |
|------------------------|-----------------------------------------------------------------------|
| <b>Skin</b>            | Contact may result in mechanical irritation, redness and rash.        |
| <b>Eye</b>             | Contact may result in mechanical irritation, lacrimation and redness. |
| <b>Sensitisation</b>   | Not classified as causing skin or respiratory sensitisation.          |
| <b>Mutagenicity</b>    | Not classified as a mutagen.                                          |
| <b>Carcinogenicity</b> | Not classified as a carcinogen.                                       |

**PRODUCT NAME SUPERFECT**

|                                 |                                                                |
|---------------------------------|----------------------------------------------------------------|
| <b>Reproductive</b>             | Not classified as a reproductive toxin.                        |
| <b>STOT - single exposure</b>   | Not classified as causing organ damage from single exposure.   |
| <b>STOT - repeated exposure</b> | Not classified as causing organ damage from repeated exposure. |
| <b>Aspiration</b>               | Not classified as causing aspiration.                          |

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**12. ECOLOGICAL INFORMATION**

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**12.1 Toxicity**

No information provided.

**12.2 Persistence and degradability**

No information provided.

**12.3 Bioaccumulative potential**

No information provided.

**12.4 Mobility in soil**

The orthophosphate in superphosphate is readily available for plant root uptake. It is also sorbed and held tightly on the surface of soil colloids (clay and organic matter). The main way in which phosphorus is lost from agricultural soils is through soil erosion, attached to eroded soil particles.

**12.5 Other adverse effects**

Avoid spills and contamination of waterways. Phosphorus fertilisers can stimulate weed and algal growth if lost to static surface waterways. Algae affect water quality and taste.

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**13. DISPOSAL CONSIDERATIONS**

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**13.1 Waste treatment methods**

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Waste disposal</b> | Ideally, the fertiliser should be used for its intended purpose. Beneficial reuse is the preferred disposal option. For fertiliser that is physically degraded but not contaminated in any way, this may necessitate using different application equipment and methods to apply it. If the fertiliser is contaminated with other fertilisers, soil, or other non-harmful substances, and it can be satisfactorily applied, use it for its nutrient value in pasture, crops or on a recreational area, e.g. lawns and parks. If contaminated with other materials, e.g. fuel, oil or chemicals, the fertiliser waste must be disposed of in accordance with relevant local legislation. Contact the Waste Management Authority for advice. |
| <b>Legislation</b>    | Dispose of in accordance with relevant local legislation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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**14. TRANSPORT INFORMATION**

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**NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA**

|                                    | <b>LAND TRANSPORT (ADG)</b> | <b>SEA TRANSPORT (IMDG / IMO)</b> | <b>AIR TRANSPORT (IATA / ICAO)</b> |
|------------------------------------|-----------------------------|-----------------------------------|------------------------------------|
| <b>14.1 UN Number</b>              | None allocated.             | None allocated.                   | None allocated.                    |
| <b>14.2 Proper Shipping Name</b>   | None allocated.             | None allocated.                   | None allocated.                    |
| <b>14.3 Transport hazard class</b> | None allocated.             | None allocated.                   | None allocated.                    |
| <b>14.4 Packing Group</b>          | None allocated.             | None allocated.                   | None allocated.                    |

**14.5 Environmental hazards**

No information provided.

**14.6 Special precautions for user**

|                     |                 |
|---------------------|-----------------|
| <b>Hazchem code</b> | None allocated. |
|---------------------|-----------------|

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**15. REGULATORY INFORMATION**

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### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

|                           |                                                                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Poison schedule</b>    | A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP). |
| <b>Classifications</b>    | Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).                    |
| <b>Inventory listings</b> | <b>AUSTRALIA: AIIIC (Australian Inventory of Industrial Chemicals)</b><br>All components are listed on AIIIC, or are exempt.                                    |

## 16. OTHER INFORMATION

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Additional information</b> | <p><b>PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:</b></p> <p>The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.</p> |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Abbreviations</b> | <p>ACGIH American Conference of Governmental Industrial Hygienists</p> <p>CAS # Chemical Abstract Service number - used to uniquely identify chemical compounds</p> <p>CNS Central Nervous System</p> <p>EC No. EC No - European Community Number</p> <p>EMS Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)</p> <p>GHS Globally Harmonized System</p> <p>GTEPG Group Text Emergency Procedure Guide</p> <p>IARC International Agency for Research on Cancer</p> <p>LC50 Lethal Concentration, 50% / Median Lethal Concentration</p> <p>LD50 Lethal Dose, 50% / Median Lethal Dose</p> <p>mg/m<sup>3</sup> Milligrams per Cubic Metre</p> <p>OEL Occupational Exposure Limit</p> <p>pH relates to hydrogen ion concentration using a scale of 0 (highly acidic) to 14 (highly alkaline).</p> <p>ppm Parts Per Million</p> <p>STEL Short-Term Exposure Limit</p> <p>STOT-RE Specific target organ toxicity (repeated exposure)</p> <p>STOT-SE Specific target organ toxicity (single exposure)</p> <p>SUSMP Standard for the Uniform Scheduling of Medicines and Poisons</p> <p>SWA Safe Work Australia</p> <p>TLV Threshold Limit Value</p> <p>TWA Time Weighted Average</p> |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                      |                                                                                                                                                          |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Report status</b> | This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ("SDS"). |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

**PRODUCT NAME    SUPERFECT**

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**[ End of SDS ]**