# MATERIAL SAFETY DATA SHEET

## RPD INFORMATION

| Address          | 5218 Barthel Industrial Drive  
|                  | Albertville, MN 55301          |
| Website          | www.rpdinc.com                 |
| Email            | sales@rpdinc.com               |
| Phone            | 763-497-2071 or 800-497-2071   |
| Fax              | 763-497-2295                   |

## RPD PRODUCT INFORMATION

RPD is an authorized distributor

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>879-158</td>
<td>158°F Low Melting Alloy</td>
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</tbody>
</table>
MATERIAL SAFETY DATA SHEET
METSPEC 158

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME METSPEC 158
PRODUCT USE Base metals and alloys, industrial uses: Use of substances as such or in preparations at industrial sites.
SUPPLIER 5N Plus Fairfield Inc
515 Commerce Drive
Fairfield, Connecticut 06825
United States
+1 203-384-0331
+1 203-368-4082
msds@5nplus.com
EMERGENCY TELEPHONE USA: CHEMTREC +1 800 262 8200 or 703 741 5500 (CCN - see section 16)
Canada: CANUTEC: +1 613 996 6666 (collect calls accepted)

2 HAZARDS IDENTIFICATION

EU CLASSIFICATION (1999/45) T+;R26. T;R48/23/25. Carc. Cat. 2;R45. Muta Cat. 3;R68, Repr. Cat. 3;R62, R63. N;R50/53.
HUMAN HEALTH
Contains lead which can accumulate in the body. Lead is absorbed into the body through inhalation of spray mist or by ingestion.

POTENTIAL HEALTH EFFECTS

GENERAL INFORMATION
Knowledge about health hazard is incomplete.

INHALATION
Dust may irritate throat and respiratory system and cause coughing. Vapors may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness.

INGESTION
May cause discomfort if swallowed. May cause stomach pain or vomiting.

SKIN CONTACT
Powder may irritate skin. Prolonged and frequent contact may cause redness and irritation.

EYE CONTACT
Particles in the eyes may cause irritation and smarting. Repeated exposure may cause chronic eye irritation.

HEALTH WARNINGS
Contains a substance/a group of substances which may cause cancer. Contains a substance/a group of substances with possible risk of harm to the unborn child and with possible risk of impaired fertility. Contains lead. Danger of cumulative effects (may cause damage to blood, kidneys and the nervous system).

ROUTE OF ENTRY
Ingestion. Skin and/or eye contact. Inhalation.

SPECIFIC EFFECTS
Contains lead. Danger of cumulative effects (may cause damage to blood, kidneys and the nervous system).

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>BISMUTH</td>
<td>231-177-4</td>
<td>7440-69-9</td>
<td>50%</td>
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<tr>
<td>LEAD</td>
<td>231-100-4</td>
<td>7439-92-1</td>
<td>26.7%</td>
</tr>
<tr>
<td>TIN</td>
<td>231-141-8</td>
<td>7440-31-5</td>
<td>13%</td>
</tr>
<tr>
<td>CADMIUM</td>
<td>231-152-8</td>
<td>7440-43-9</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

COMPOSITION COMMENTS
Not regarded as a health or environmental hazard in the supplied form. Please ensure that a risk assessment is carried out for your own use if processed or worked.

4 FIRST-AID MEASURES
GENERAL INFORMATION
CAUTION! First aid personnel must be aware of own risk during rescue!

NOTES TO THE PHYSICIAN
No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

INHALATION
Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

INGESTION
Immediately rinse mouth and provide fresh air. Get medical attention if any discomfort continues.

SKIN CONTACT
Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

EYE CONTACT
Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
Use fire-extinguishing media appropriate for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES
Avoid breathing fire vapors. Fight advanced or massive fires from safe distance or protected location. The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment. Avoid release to the environment. Dike and collect extinguishing water.

UNUSUAL FIRE & EXPLOSION HAZARDS
Dust may form explosive mixture with air.

SPECIFIC HAZARDS
When heated and in case of fire, harmful vapors/gases may be formed.

PROTECTIVE MEASURES IN FIRE
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Avoid contact with skin and eyes. Avoid inhalation of dust and vapors. Wear protective clothing as described in Section 8 of this material safety data sheet.

ENVIRONMENTAL PRECAUTIONS
Avoid discharge into drains, water courses or onto the ground.

SPILL CLEAN UP METHODS
Avoid generation and spreading of dust. Should be prevented from entering drains. Collect spillage with shovel, broom or the like and reuse, if possible. Dispose of large amounts of spillage/waste according to agreement with local authorities. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container.

7 HANDLING AND STORAGE

HANDLING
Avoid spillings, skin and eye contact. Avoid inhalation of dust. Mechanical ventilation or local exhaust ventilation may be required. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Pregnant women should not work with the product, if there is the least risk of lead exposure.

STORAGE
Store in a cool and well-ventilated place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>STD</th>
<th>TWA (8-hrs)</th>
<th>STEL (15 min)</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>CADMIUM</td>
<td>ACGIH</td>
<td>0,002 mg/m3</td>
<td></td>
<td>A2, as Cd</td>
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<tr>
<td>CADMIUM</td>
<td>PEL</td>
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<td>0,05 mg/m3</td>
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<td>ACGIH</td>
<td>2 mg/m3</td>
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<td>as Sn</td>
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</table>
ACGIH=American Conference of Governmental Industrial Hygienists.
A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans.
A2: Suspected Human Carcinogen.

**PROCESS CONDITIONS**
Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

**PROTECTIVE EQUIPMENT**

**ENGINEERING MEASURES**
Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.

**RESPIRATORY EQUIPMENT**
If ventilation is insufficient, suitable respiratory protection must be provided.

**HAND PROTECTION**
Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

**EYE PROTECTION**
Wear approved chemical safety goggles where eye exposure is reasonably probable.

**HYGIENE MEASURES**
Wash hands at the end of each work shift and before eating, smoking and using the toilet. DO NOT SMOKE IN WORK AREA! Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. Change work clothing daily if there is any possibility of contamination. Wash contaminated clothing before reuse.

**SKIN PROTECTION**
Wear suitable protective clothing as protection against splashing or contamination.

**ENVIRONMENTAL EXPOSURE CONTROLS**
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### 9 PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th><strong>APPEARANCE</strong></th>
<th>Metal or metallic Solid</th>
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<tbody>
<tr>
<td><strong>COLOR</strong></td>
<td>Grey.</td>
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<tr>
<td><strong>SOLUBILITY</strong></td>
<td>Insoluble in water</td>
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<tr>
<td><strong>MELTING POINT (°C)</strong></td>
<td>70</td>
</tr>
</tbody>
</table>

### 10 STABILITY AND REACTIVITY

**STABILITY**
Stable under normal temperature conditions and recommended use.

**CONDITIONS TO AVOID**
Avoid excessive heat for prolonged periods of time.

**HAZARDOUS POLYMERISATION**
Not relevant

**MATERIALS TO AVOID**
Strong acids. Strong oxidizing substances.

**HAZARDOUS DECOMPOSITION PRODUCTS**
When heated, vapors/gases hazardous to health may be formed.

### 11 TOXICOLOGICAL INFORMATION

**GENERAL INFORMATION**
Knowledge about health hazard is incomplete.

**INHALATION**
Dust may irritate throat and respiratory system and cause coughing. Vapors may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness.

**INGESTION**
May cause discomfort if swallowed. May cause stomach pain or vomiting.
SKIN CONTACT
Powder may irritate skin. Prolonged and frequent contact may cause redness and irritation.

EYE CONTACT
Particles in the eyes may cause irritation and smarting. Repeated exposure may cause chronic eye irritation.

HEALTH WARNINGS
Contains a substance/a group of substances which may cause cancer. Contains a substance/a group of substances with possible risk of harm to the unborn child and with possible risk of impaired fertility. Contains lead. Danger of cumulative effects (may cause damage to blood, kidneys and the nervous system).

ROUTE OF ENTRY
Ingestion. Skin and/or eye contact. Inhalation.

SPECIFIC EFFECTS
Contains lead. Danger of cumulative effects (may cause damage to blood, kidneys and the nervous system).

TIN (CAS: 7440-31-5)

GENERAL INFORMATION
Knowledge about health hazard is incomplete.

INHALATION
NOTE! Effects may be delayed. Keep affected person under observation. Vapors may cause headache.

INGESTION
May cause discomfort if swallowed. May irritate and cause stomach pain, vomiting and diarrhea. May cause fever.

SKIN CONTACT
Powder may irritate skin. Prolonged and frequent contact may cause redness and irritation.

EYE CONTACT
Particles in the eyes may cause irritation and smarting. Repeated exposure may cause chronic eye irritation.

ROUTE OF ENTRY
Ingestion. Inhalation. Skin and/or eye contact.

CADMIUM (CAS: 7440-43-9)

GENERAL INFORMATION
This material is toxic.

INHALATION
Harmful: danger of serious damage to health by prolonged exposure through inhalation. Dust in high concentrations may cause respiratory problems.

INGESTION
Toxic: danger of serious damage to health by prolonged exposure if swallowed. May cause stomach pain, diarrhea, vomiting and fever.

SKIN CONTACT
No specific health warnings noted.

EYE CONTACT
Particles in the eyes may cause irritation and smarting.

CARCINOGENICITY

ROUTE OF ENTRY
Ingestion. Inhalation.

TARGET ORGANS
Kidneys Respiratory system, lungs

12 ECOLOGICAL INFORMATION

ECOTOXICITY
Not regarded as a health or environmental hazard in the supplied form. Please ensure that a risk assessment is carried out for your own use if processed or worked. The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

MOBILITY
The product is insoluble in water.

BIOACCUMULATION
Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

DEGRADABILITY
The product solely consists of inorganic compounds which are not biodegradable.

WATER HAZARD CLASSIFICATION
WGK 3
ECOTOXICITY
The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

LC 50, 96 hrs, Fish mg/l 15.5

MOBILITY
The product is insoluble in water.

BIOACCUMULATION
Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

DEGRADABILITY
The product solely consists of inorganic compounds which are not biodegradable.

WATER HAZARD CLASSIFICATION  WGK 3

13 DISPOSAL CONSIDERATIONS

WASTE MANAGEMENT
When handling waste, consideration should be made to the safety precautions applying to handling of the product.

DISPOSAL METHODS
Recover and reclaim or recycle, if practical. Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION

TRANSPORT NOTES
The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, DOT).

No transport warning sign required.

ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT

15 REGULATORY INFORMATION

INVENTORIES

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAN</th>
<th>US</th>
<th>EU</th>
<th>AUS</th>
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<table>
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US FEDERAL REGULATIONS

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**CLEAN AIR ACT**

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<tr>
<td>LEAD</td>
<td>Not Listed</td>
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<td>TIN</td>
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**US STATE REGULATIONS**

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**16 OTHER INFORMATION**

**GENERAL INFORMATION**

Only trained personnel should use this material.

**INFORMATION SOURCES**


**ISSUED BY**

Global REACH and Material Co-ordinator

**REVISION DATE** 08/20/2012

**VERSION No.** 1

**DATE** 12/12/2011

**DISCLAIMER**

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