1. Product and company identification

1.1. Product identifier
INTERZINC 125 RIVERGUM
Product Code QHA996

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use Refer Technical Data Sheet.
Application Method Refer Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet
Manufacturer Akzo Nobel Coatings Ltd.
34 Moo 4, Petchkasem Rd,
Km.28.5, Omyai.
Sampran, 73160,
Nakornpathom, Thailand

Telephone No. 02 4290031
Fax No. 02 4290463

1.4. Emergency telephone number
For Poisons Advice telephone For Advice to Doctors & Hospitals only

2. Hazard identification of the product

2.1. Classification of the substance or mixture
Flam. Liq. 2;H225 Highly Flammable liquid and vapour.
Aquatic Chronic 1;H410 Very toxic to aquatic life with long lasting effects.

2.2. Label elements
Using the Toxicity Data listed in section 11 & 12 the product is labelled as follows.

Danger
H225 Highly flammable liquid and vapour.
H410 Very toxic to aquatic life with long lasting effects.

[Prevention]:
P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.
P260 Do not breathe mist / vapours / spray.
P262 Do not get in eyes, on skin, or on clothing.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.
[Response]:
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.
P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
P331 Do NOT induce vomiting.
P332+313 If skin irritation occurs: Get medical advice / attention.
P370 In case of fire:
P378 Use alcohol resistant foam, CO2, powder, water spray for extinction. Do not use water jet.
P391 Collect spillage.

[Storage]:
P403+233 Store in a well ventilated place. Keep container tightly closed.

[Disposal]:
P501 Dispose of contents / container in accordance with local / national regulations.

2.3. Other hazards
This product contains no PBT/vPvB chemicals.

3. Composition/information on ingredients

This product contains the following hazardous substances.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Dust</td>
<td>&gt;50</td>
<td>Water react. 1;H260</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0007440-66-6</td>
<td></td>
<td>Pyr. Sol. 1;H250</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aquatic Acute 1;H400</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aquatic Chronic 1;H410</td>
<td></td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light aromatic</td>
<td>10-25</td>
<td>Asp. Tox. 1;H304</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0064742-95-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>2.5-10</td>
<td>Asp. Tox. 1;H304</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0064742-48-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chrome oxide</td>
<td>1-2.5</td>
<td></td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0001308-38-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethanol</td>
<td>1-2.5</td>
<td>Flam. Liq. 2;H225</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0000064-17-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xylene</td>
<td>1-2.5</td>
<td>Flam. Liq. 3;H226</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0001330-20-7</td>
<td></td>
<td>Acute Tox. 4;H332</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute Tox. 4;H312</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Irrit. 2;H315</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Asp. Tox. 1;H304</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye Irrit. 2;H319</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STOT SE 3;H335</td>
<td></td>
</tr>
</tbody>
</table>

[1] Substance classified with a health or environmental hazard.

*The full texts of the Hazard (H) phrases are shown in Section 16.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence do not require reporting in this section.

4. First aid measures

4.1. Description of first aid measures

General
In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

Inhalation
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Skin Contact**
Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognised skin cleanser. Do NOT use solvents or thinners.

**Eye Contact**
Irrigate copiously with clean fresh water for at least 10 minutes, holding the eyelids apart and seek medical attention.

**Ingestion**
If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

### 4.2. Most important symptoms and effects, both acute and delayed
No data available

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

#### 5. Fire-fighting measures

**5.1. Extinguishing media**
Recommended extinguishing media; alcohol resistant foam, CO2, powder, water spray.

Do not use - water jet.

Note; Fire will produce dense black smoke. Decomposition products may be hazardous to health. Avoid exposure and use breathing apparatus as appropriate.

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water courses.

**5.2. Special hazards arising from the substance or mixture**
Fire will produce dense black smoke. Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Avoid exposure and use breathing apparatus as appropriate.

**5.3. Advice for fire-fighters**
Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water courses.

#### 6. Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**
Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapour levels are below the Lower Explosive Limit before re-entering.

**6.2. Environmental precautions**
Do not allow spills to enter drains or watercourses.

**6.3. Methods and material for containment and cleaning up**
Ventilate the area and avoid breathing vapours. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.
Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes the Environmental Protection Agency should also be informed.

### 7. Handling and storage

#### 7.1. Precautions for safe handling

**Handling**

This coating contains solvents. Solvent vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Areas of storage, preparation and application should be ventilated to prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits.

**In Storage**

Handle containers carefully to prevent damage and spillage.

Naked flames and smoking should not be permitted in storage areas. It is recommended that fork lift trucks and electrical equipment are protected to the appropriate standard.

This coating contains solvents. Solvent vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Areas of storage, preparation and application should be ventilated to prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits.

#### 7.2. Conditions for safe storage, including any incompatibilities

Keep away from the following materials: oxidising agents, strong alkalis, strong acids.

Avoid skin and eye contact. Avoid inhalation of vapours and spray mists. Observe label precautions. Use personal protection as shown in section 8.

Smoking, eating and drinking should be prohibited in all preparation and application areas.

Never use pressure to empty a container; containers are not pressure vessels.

This is a highly flammable liquid. Refer to the requirements of any local regulations for the storage and handling regulations pertaining to this material.

There are no exposure scenarios, see details in section 1.

#### 7.3. Specific end use(s)

Store in a well ventilated, dry place away from sources of heat and direct sunlight.

Store on concrete or other impervious floor, preferably with bunding to contain any spillage. Do not stack more than 3 pallets high.

Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in the original container or one of the same material.

Prevent unauthorised access.

All sources of ignition (hot surfaces, sparks, open flames etc) should be excluded from areas of preparation and application. All electrical equipment (including torches) should be protected (Ex) to the appropriate standard.

The product may charge electrostatically. Always use earthing leads when pouring solvents and transferring product. Operators should wear clothing which does not generate static (at least 60% natural fibre) and antistatic footwear; floors should be of conducting type.

### 8. Exposure controls and personal protection

#### 8.1. Control parameters

Exposure standards are those provided by the ACGIH (American Conference of Government Industrial
<table>
<thead>
<tr>
<th>Material</th>
<th>Short term (15 min. ave) ppm</th>
<th>Short term (15 min. ave) mg/m³</th>
<th>Long term (8hr time weighted average) ppm</th>
<th>Long term (8hr time weighted average) mg/M³</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chrome oxide</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Ethanol</td>
<td>-</td>
<td>-</td>
<td>1000</td>
<td>1880</td>
<td></td>
</tr>
<tr>
<td>Mica</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Talc</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Xylene</td>
<td>150</td>
<td>651</td>
<td>100</td>
<td>434</td>
<td></td>
</tr>
<tr>
<td>Zinc Dust</td>
<td>-</td>
<td>20</td>
<td>-</td>
<td>10-</td>
<td></td>
</tr>
</tbody>
</table>

Key to notification

(P) Peak exposure limit
(R) Suppliers Recommended Limit
(Sk) There is a risk of absorption through unbroken skin
(Sen) Sensitiser
(Cat1) Category 1 - established human carcinogen
(Cat2) Category 2 - probable human carcinogen
(Cat3) Category 3 - substances suspected of having carcinogenic potential

DNEL/PNEC values
No Data Available

8.2. Exposure controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapour below occupational exposure limits suitable respiratory protection must be worn.

Eye Protection
Wear safety eyewear, e.g. safety spectacles, goggles or visors to protect against the splash of liquids. Eyewear should comply with an approved standard.

Wear a full face shield if mixing or pouring operations pose a risk of splashes.

An eye wash station is suggested as a good work place practice.

Skin Protection
Gloves of an appropriate material should be worn during mixing and application.

Other
Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. Barrier creams may help to protect areas which are difficult to cover such as the face and neck. They should however not be applied once exposure has occurred. Petroleum jelly based types such as Vaseline should not be used. All parts of the body should be washed after contact.

Respiratory Protection
When concentrations exceed the exposure limits shown above, workers must wear appropriate approved respirators. Provision of other controls such as exhaust ventilation should be considered if practical.

Thermal hazards
No Data Available

9. Physical and chemical properties

Colour
Coloured Liquid
Odour
Odour threshold
pH
Melting point / freezing point (°C)
Initial boiling point and boiling range (°C)
Flash Point (°C)
Evaporation rate (Ether = 1)
Flammability (solid, gas)
Upper/lower flammability or explosive limits
Vapour pressure (Pa)
Vapour Density
Specific Gravity
Solubility in Water
Partition coefficient n-octanol/water (Log Kow)
Autoignition temperature (°C)
Decomposition temperature
Viscosity (cSt)

9.2. Other information
No further information

10. Stability and reactivity

10.1. Reactivity
No data available

10.2. Chemical stability
Stable under recommended storage and handling conditions (see section 7). When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, oxides of nitrogen and smoke.

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid possible exothermic reactions.

10.3. Possibility of hazardous reactions
May react exothermically with: oxidising agents, strong alkalis, strong acids.

10.4. Conditions to avoid
Stable under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
Keep away from the following materials: oxidising agents, strong alkalis, strong acids.

10.6. Hazardous decomposition products
Fire will produce dense black smoke. Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
Avoid exposure and use breathing apparatus as appropriate.

11. Toxicological information

Acute toxicity

Exposure to solvent vapour concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

The preparation has been assessed using the Acute Toxicity Data listed below, and classified for toxicological hazards accordingly. See section 2 for details.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapour LD50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LD50, mg/L/4hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chrome oxide - (1308-38-9)</td>
<td>10,000.00, Rat</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Ethanol - (64-17-5)</td>
<td>7,060.00, Rat</td>
<td>20,000.00, Rabbit</td>
<td>124.70, Rat</td>
<td>Not Available</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy - (64742-48-9)</td>
<td>5,000.00, Rat</td>
<td>3,160.00, Rabbit</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light aromatic - (64742-95-6)</td>
<td>6,800.00, Rat</td>
<td>3,400.00, Rabbit</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Xylene - (1330-20-7)</td>
<td>4,299.00, Rat</td>
<td>1,548.00, Rabbit</td>
<td>Not Available</td>
<td>20.00, Rat</td>
</tr>
<tr>
<td>Zinc Dust - (7440-66-6)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity (mouth)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Acute Toxicity (skin)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Acute Toxicity (inhalation)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Eye damage/irritation</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Sensitization (respiratory)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Sensitization (skin)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Germ toxicity</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Specific target organ systemic toxicity (single exposure)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Specific target organ systemic Toxicity (repeated exposure)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not Classified</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

12. Ecological information

12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details.

There are no data available on the product itself.

The product should not be allowed to enter drains or water courses.

Aquatic Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Dust - (7440-66-6)</td>
<td></td>
<td>0.068, Daphnia</td>
<td></td>
</tr>
</tbody>
</table>
12.2. Persistence and degradability
There is no data available on the preparation itself.

12.3. Bioaccumulative potential
Not Measured

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment
This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects
No data available

13. Disposal considerations

13.1. Waste treatment methods
Do not allow into drains or water courses. Wastes and empty containers should be disposed of in accordance with State and Federal regulations.

Using information provided in this data sheet advice should be obtained from the local Waste Regulation Authority as to whether special waste regulations apply.

14. Transport information

14.1. UN number
14.2. UN proper shipping name  Non hazardous
14.3. Transport hazard class(es)  Non hazardous

Road and Rail Transport  Non hazardous

IMDG  Class/Div  Sub Class

Ems

ICAO/IATA  Class  Sub Class

14.4. Packing group

14.5. Environmental hazards

Road and Rail  Environmentally Hazardous: Yes
Transport

IMDG reference: Marine Pollutant: Yes (Zinc Powder)

14.6. Special precautions for user
No further information

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not Applicable

15. Regulatory information

The product and all its components comply with these local regulations

Australia:
The Australian Industrial Chemicals (Notification and Assessment) Act 1989 (Commonwealth) - NICNAS

New Zealand:
The New Zealand inventory of chemicals (NZIoC) or otherwise are in compliance with all other EPA NZ requirements.

Singapore:
The labelling, SDS, PEL and other requirements to the WSH (General Provision) regulations

Other regional regulatory Information:
None noted.

16. Other information

The information on this SDS is based upon the present state of our knowledge and on current law. The product should not be used for purposes other than shown in the product data sheet without first obtaining written advice.

It is always the responsibility of the user to take all necessary steps to meet the demands of applicable legislation.

The information in this Safety Data Sheet is required according to legislation.

The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H250 Catches fire spontaneously if exposed to air.
H260 In contact with water releases flammable gases which may ignite spontaneously.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness and dizziness.
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.
H411 Toxic to aquatic life with long lasting effects.

This SDS is valid for 5 years from the revised date on page 1.
The revision date is in American format (e.g. MM/DD/YY).

End of document

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.