



Reference No. : R601
Product Name : Baker's Soldering Fluid

MATERIAL SAFETY DATA SHEET

Section 1 : IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **BAKER'S SOLDERING FLUID**
Other Names: **Radiant No.2 Soldering Fluid**
Recommended Use: A general purpose Soldering Fluid

Supplier's / Manufacturer's

Name: Consolidated Alloys
Address: 32 Industrial Avenue, Thomastown, Victoria 3074, AUSTRALIA
Telephone No.: (03) 9359 5811
Emergency No.: (03) 9359 5811 – Business Hours only
0439 062 480 – After Hours (24Hrs)
Poisons Information Centre
Victoria
Telephone No.: 131126

Section 2 : HAZARD IDENTIFICATION

Hazard Classification according to criteria of Worksafe Australia.

Risk Phrase(s)

| | |
|--------|---------------------------------|
| R22 | Harmful if swallowed. |
| R34 | Causes burns. |
| R36/38 | Irritating to skin and eyes. |
| R41 | Risk of serious damage to eyes. |

Safety Phrase(s)

| | |
|--------|--|
| S1/2 | Keep locked up and out of the reach of children. |
| S7 | Keep container tightly closed. |
| S13 | Keep away from food, drink and animal feeding stuffs. |
| S24/25 | Avoid contact with skin and eyes. |
| S26 | In case of contact with eyes rinse immediately with plenty of water and seek medical advise. |
| S28 | In the event of contact with skin wash immediately with plenty of water. |
| S45 | In the case of an accident or you feel unwell, contact a doctor or Poisons immediately (show the label where possible) |
| S62 | If swallowed do not induce vomiting: seek medical advice immediately and show this container and label. |



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Section 3 : COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Entity | Proportion | CAS Number |
|-------------------|------------|------------|
| Zinc Chloride | 30-60% | 7646-85-7 |
| Ammonium Chloride | <10% | 12125-02-9 |
| Hydrochloric Acid | <2% | 7647-01-0 |
| Water | Balance | 7732-18-5 |

Section 4 : FIRST AID MEASURES

Description of necessary measures according to route of exposure.

| | |
|--|--|
| Ingestion: | DO NOT induce vomiting. If poisoning occurs, contact a doctor or Poisons Information Centre. If conscious, give water to rinse out mouth and drink. Provide liquid slowly but as much as casualty will drink. |
| Eye: | If contact with eyes occurs, hold eyes open, flood with water for at least 15 minutes and see a doctor without delay. |
| Skin: | Immediately wash away with plenty of soap and water. Remove ALL contaminated clothing. If swelling, redness blistering or irritation occurs seek medical advice. |
| Inhalation: | First aid is unlikely to be required from normal use. However, if combustion products are inhaled remove to fresh air. Keep warm and rested. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Seek medical advice. |
| Medical Attention and Special Treatment: | Treat symptomatically. For ingestion consider gastric lavage. |

Additional information

| | |
|---|--|
| Medical Conditions Aggravated Caused by Exposure: | No chronic effects have been reported in humans from normal industrial use. Neither zinc nor ammonium chloride has been listed by the International Agency for Research on Cancer as either human or animal carcinogens. |
|---|--|



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Section 5 : FIRE FIGHTING MEASURES

| | |
|--------------------------------|--|
| Extinguishing Media: | Water spray or fog, Foam, Dry Chemical Powder, Carbon Dioxide. |
| Hazardous Combustion Products: | Not combustible. However, heating to decomposition produces toxic fumes of hydrogen chloride, ammonia, nitrogen oxides and zinc oxides. |
| Special Protective Equipment: | Fire fighters should wear self contained breathing apparatus if risk of exposure to products of decomposition. |
| <u>Additional information</u> | Fire fighting procedure- Alert Fire Brigade tell them location and nature of hazard. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. |
| HAZCHEM CODE: | 2X |

Section 6 : ACCIDENTAL RELEASE MEASURES

| | |
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| Emergency Procedures: | Personnel involved in the clean up should wear full protective clothing. |
| Methods and Materials for Containment and Clean Up Procedures | |
| Small Spills / Leaks: | Wash with plenty of water. |
| Large Spills / Leaks: | Environment Hazard: contain spillage. Absorb spillage with inert material such as sand or vermiculite. Collect residues and seal in labelled drum for disposal. Spread area with lime and leave for at least 1 hour before washing. Wash area with large quantities of water and prevent run off into drains and waterways. If the product does enter a waterway, advise the EPA or your local waste management authority. |

For Personal Protective Equipment (PPE) - refer to Section 8 of this MSDS (if required)



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Section 7 : HANDLING AND STORAGE

Precautions for Safe Handling: Ensure an eye bath and safety shower are available and ready for use. Observe good personnel hygiene practices and recommended procedures. Wash thoroughly after handling.

Conditions for Safe Storage: Store and handle in accordance with the requirements of the Dangerous Goods, (storage and handling) Regulations for Class 8 Substances (Part 10). This material is a Schedule 6 Poison and must be packaged and labelled in accordance with the Drugs, Poisons and Controlled Substances Act and Regulations. Store in a cool, dry, well ventilated place.

Section 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards – *as regulated by:* Worksafe Australia

| Chemical Name | ES – TWA | ES - STEL | ES – Peak |
|--------------------------|----------------------|---------------------|-----------------|
| Zinc Chloride (Fume) | 1 mg/m ³ | 2 mg/m ³ | |
| Ammonium Chloride (Fume) | 10 mg/m ³ | 20mg/m ³ | |
| Hydrogen Chloride | 5 ppm | | Peak Limitation |

Biological Limit Values No data available.

Engineering Controls: If irritating fumes of hydrogen chloride are given off, use with local exhaust ventilation.

Personal Protective Equipment (PPE)

Eye / Face Protection: Wear chemical goggles or full face mask. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Skin Protection: Wear safety footwear, overalls and PVC gloves and apron.

Respiratory Protection: If inhalation risk remains (unlikely), wear a particulate/gas respirator complying with AS 1716. Use in accordance with AS 1715.



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Section 9 : PHYSICAL AND CHEMICAL PROPERTIES

| | |
|------------------------|--------------|
| Appearance: | Liquid. |
| Colour: | Colourless |
| Odour: | Nil |
| Vapour Pressure: | N/A |
| Vapour Density: | N/A |
| Boiling Point / Range: | 100 – 105 °C |
| Melting Point: | N/A |
| Solubility in Water: | N/A |
| Specific Gravity: | 1.32 |
| Flash Point: | N/A |
| pH: | 3.9 |

For Flammable Limits (as a percentage volume in air)

| | |
|--|-----|
| Lower Explosion Limit : | N/A |
| Upper Explosion Limit : | N/A |
| Ignition Temperature: | N/A |
| Specific Heat Value : | N/A |
| Particle Size: | N/A |
| Volatile Organic Compounds (VOC) Content | N/A |
| Evaporation Rate : | N/A |
| Viscosity : | N/A |
| Percent Volatile : | N/A |
| Octanol/Water partition coefficient : | N/A |
| Saturated Vapour Concentration : | N/A |
| Additional Characteristics | N/A |
| Flame Propagation/Burning Rate of Solid Materials : | N/A |
| Properties of material that may initiate or contribute to fire intensity : | N/A |
| Potential for Dust Explosion : | N/A |
| Reactions that Release Flammable Gases : | N/A |
| Fast or Intensely Burning Characteristics : | N/A |
| Non-Flammables that could contribute unusual hazards to a fire : | N/A |
| Release of invisible flammable vapour and gases : | Nil |
| Decomposition Temperature : | N/A |

Additional Information

| | |
|--------------------|-----|
| Molecular Weight : | N/A |
| Solubility : | N/A |



Consolidated Alloys
A Division of C.A. Group Australasia Pty. Ltd.
ABN 83 005 084 097 ACN 005 084 097

Head Office : 32 Industrial Avenue Thomastown, Victoria 3074
AUSTRALIA
Mail : PO Box 199, Reservoir, Victoria 3073
AUSTRALIA
Telephone : (03) 9359 5811
Facsimile : (03) 9359 4076
E-mail : info@cagroup.com.au

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Section 10 : STABILITY AND REACTIVITY

| | |
|-----------------------------------|---|
| Chemical Stability: | Product is stable under normal conditions of use and storage. |
| Conditions to Avoid: | Avoid excessive heat and direct sunlight. |
| Incompatible Materials: | Incompatible with oxidising agents, acids and alkali. |
| Hazardous Decomposition Products: | No data available. |
| Hazardous Reactions: | No data available. |

Section 11 : TOXICOLOGICAL INFORMATION

| | |
|----------------|--|
| Toxicity Data: | For Zinc Chloride: Acute oral LD ₅₀ (Rat): 350 mg/kg. |
| Ingestion: | The liquid is corrosive and harmful to the gastro-intestinal tract. An unlikely route of entry from industrial use. |
| Eye: | The liquid is irritating and corrosive to the eyes and is capable of causing severe damage with loss of sight. On eye contact this product will cause tearing, stinging, blurred vision and redness. |
| Skin: | Corrosive and capable of causing burns to the skin with prolonged contact. |
| Inhaled: | Not an inhalation risk at normal temperatures. At soldering temperatures minor respiratory tract irritation may occur due to hydrochloric acid fumes. |

Section 12 : ECOLOGICAL INFORMATION

| | |
|------------------------------|--|
| Ecotoxicity: | Toxic to marine organisms and expected to be fatal unless concentration is very low. |
| Persistence / Degradability: | No data available. |
| Mobility: | No data available. |
| Environmental Fate: | No data available. |
| Bioaccumulative Potential : | No data available. |



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Section 13 : DISPOSAL CONSIDERATIONS

Disposal Methods: Dispose of in accordance with all local, state and federal regulations at an approved waste disposal facility.

Special Precautions for Landfill or Incineration: No data available.

The Disposal Considerations mentioned above applies to the material / product described in this MSDS as manufactured. Further processing, use, or contamination of the product may make the information inappropriate, inaccurate or incomplete.

Section 14 : TRANSPORT INFORMATION

UN Number: 1760
UN Shipping Name: CORROSIVE LIQUID, N.O.S.
Dangerous Goods Class: 8
Packing Group: III
Special Precautions / Requirement: Handle with care.
HAZCHEM Code: 2X

Additional Information –
Material for Export: N/A

Section 15 : REGULATORY INFORMATION

Poison Schedule Number: 6
EPG : 8A1
AICS Name : N/A
NZ Toxic Substance N/A



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Section 16 : OTHER INFORMATION

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----- End of MSDS -----