Sodium Bicarbonate (Armex Flow Formula XL)

Not dangerous or hazardous according to the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)]

IMPORTANT NOTICE: This Safety Data Sheet (SDS) is issued by Burwell Technologies in accordance with National Occupational Health and Safety Commission guidelines. The information contained in this document must not be added to, deleted or altered. Burwell Technologies will issue a new SDS when there is a change in the product specifications and/or with the National Occupational Health and Safety Commission guidelines/regulations. Burwell Technologies will not accept any responsibility for any changes made to its SDS in content by any other person or organisation.

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1 | IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product (Material) Name: Sodium Bicarbonate (Armex Flow Formula XL)
Other Names: Bicarbonate of soda, baking soda, sodium hydrogen carbonate, bicarb, sodium acid carbonate
Recommended Use: Industrial abrasive media
Supplier Name: Burwell Abrasive Blasting Equipment Pty Ltd
Supplier Address: 291 Milperra Road, Revesby, NSW, 2212
Supplier Tel: (02) 9792 2733
Supplier Fax: (02) 9792 2866
Supplier Emergency Tel (24 Hours): (02) 9792 2733 (Business hours) 0418 699 139 (After hours)
Emergency Services Tel (24 Hours): 000

2 | HAZARDS IDENTIFICATION

Hazard Classification: NON HAZARDOUS SUBSTANCE. NON DANGEROUS GOODS. According to the Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)]. However caution must still be taken in handling and storage for health and safety.

3 | COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity of the Pure Substance: NaHCO₃
Common Names/ Synonym’s: Bicarbonate of soda, baking soda, sodium hydrogen carbonate, bicarb, sodium acid carbonate
CAS Number: 144-55-8
4 | FIRST AID MEASURES

Facilities should be available where this product is used to carry out first aid procedures.

Description of Necessary First Aid Measures

Ingestion: Non-toxic however swallowing this product may cause immediate or delayed abdominal discomfort and potentially increase the risk of gastro-intestinal infections.

The patient should be given water to drink and medical attention should be sought if any abdominal symptoms occur. Vomiting should not be induced, but if vomiting occurs, the patient should be leant forward or placed on their left hand side to maintain an open airway.

Eye: In the event that this material comes into contact with the eyes it may have an immediate or delayed irritating effect resulting in redness, watering and/or infection.

Eyes should be immediately and thoroughly flushed with lukewarm water for as long as necessary to alleviate the problem (or for at least 15 minutes). Ensure complete irrigation of the eye by keeping eyelids apart and away from the eye and moving the eyelids by occasionally lifting the upper and lower lids. Removal of contact lenses after an eye injury should only be conducted. Professional medical assistance should be sought if symptoms persist.

Skin: Skin contact with this product and/or their dusts may lead to immediate or delayed skin irritations and in susceptible people skin sensitisation, dermatitis and/or skin infection.

The affected areas should be washed thoroughly with mild soap and lukewarm water as quickly as possible.

Inhalation: Inhalation of dust from this product may have an immediate or delayed effect to irritate, inflame or sensitise the nose, throat and lungs, and exacerbate pre-existing conditions such as asthma and bronchitis. Children, pregnant women, the elderly, people with pre-existing conditions or the immunocompromised, may be at a particular risk from these illnesses if exposed to this product.

If an irritation occurs, the affected parties should be moved (or move themselves) away from the product or its dusts into a source of fresh air. Prostheses such as false teeth, which may block the airways, should be removed where possible prior to initiating first aid procedures. Professional medical attention should be sought if symptoms persist.

5 | FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Not relevant
Hazards from Combustion Products: Not relevant
Precautions for Fire Fighting and Special Protective Equipment: Not relevant

6 | ACCIDENTAL RELEASE MEASURES

Emergency Procedures

In the event of a spill or release of the product from a transport vehicle or storage area in a sensitive environment including near water bodies:

1. Advise the applicable state based roads authority
2. Advise the applicable stated based environment body
3. Advise the product supplier emergency contact:
   (02) 9792 2733 (Business hours)
   0418 699 139 (After hours)
Methods and Materials for Containment and Clean Up Procedures

In the event of a spill or release of the product from a transport vehicle or storage area where bunding does not exist in order to contain and clean up:

- Secure the site by:
  - Covering the material with a sheet/tarpaulin secured to the ground in order to protect against dust emissions and gravitational flows into waterways.
  - Bunding the area and cover drains to protect against over-ground run-off in waterways, surrounding land and drainage systems.

- Clean up the spill immediately once the site is secured. Avoid generating dust.

- Collect the material (using a vacuum system if required), load, transport and store all of the material released for use as planned or dispose of safely in a landfill or licensed recovery facility.

- Check the surrounding area to ensure all material has been captured. Collect all material if possible or seek advice from the stated based environment body.

7 | HANDLING AND STORAGE

Precautions for Safe Handling

When handling this material ensure that workers stay away from equipment that is moving and/or processing exposed material and avoid coming into contact with the product by wearing:

- A suitable respiratory protective device conforming to AS/NZS 1715: 2009 – Selection, use and maintenance of respiratory protective devices. A Class P1 Particulate Respirator is typically most appropriate.

- Suitable gloves conforming with AS/ NZS 2161: 2008 – Occupational protective gloves. Standard duty leather/pigskin, rubber or neoprene gloves are typically most appropriate.

- Full length protective trousers and shirts (or overalls).

- Suitable boots for the site.

- Suitable eye protection conforming with AS/ NZS 1336: 1997 – Recommended practices for occupational eye protection. Low impact goggles with indirect ventilation (HT or CT with C, D optional) are typically most appropriate.

Additional handling procedures should include:

- Limit exposure to the product.

- Wash any areas of the body that the product may have come into contact after exposure.

- Regularly vacuum enclosed areas where the product is used or install a dust extraction system.

- When handling this material ensure the environment is protected from releases by not moving the material during adverse weather conditions such as wind and precipitation, bunding the handling area and providing wind breaks.

- As with all dust materials, ensure adequate ventilation against the relevant exposure standards (Section 8) and also to prevent dust explosions.

- Shower and change after completion of blasting.

- Wash hands and face after handling and blasting.

Conditions For Safe Storage

When storing this material:

- Store in closed, well-ventilated containers to prevent dust exposure.
8 | EXPOSURE CONTROLS/ PERSONAL PROTECTION

National Exposure Standards

No specific exposure standards have been allocated. However due to the dust in the product, concentrations for monitoring exposure are provided by a number of standards as listed below:

**Total Inhalable Dust**
10mg/m³ (National Occupational Health & Safety Commission, 2004).

**Total Respirable Dust**
2mg/m³ (American Conference of Governmental Occupational Hygienists, 1986).

- **Biological Limit Values:** No biological limit allocated
- **Engineering Controls:** Ensure all blast cleaning equipment complies with regulatory regulations and safety standards and are functioning adequately.
  Ensure the area for workers are adequately ventilated below exposure standards.
- **Personal Protection Equipment:** Abrasive blast helmet air line respirator with protective lens (AS/NZS 1716:2003). Heavy duty protective suit, gloves (AS/NZS 2161:2008) and foot wear (AS/NZS 2210.5:2009).

9 | PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:** White granules
- **Odour:** Odourless
- **pH:** Slightly alkaline approximately 8
- **Vapour Density:** Not applicable
- **Vapour Pressure:** Not applicable
- **Boiling point/ Range:** Not applicable- Decomposes over 50°C
- **Melting point:** Not applicable
- **Solubility:** High solubility in water
- **Specific Gravity (Relative Density):** 1294
- **Flashpoint:** Not applicable
- **Flammable limits in air:** Not applicable
- **Ignition temperature:** Not applicable

10 | STABILITY AND REACTIVITY

- **Chemical stability:** Stable
- **Conditions to avoid:** Contact with acids and acidic metals
- **Incompatible materials:** Reacts with acid evolving carbon dioxide
- **Hazardous Decomposition products:** None identified
- **Hazardous Reactions:** None identified
11 | TOXICOLOGICAL INFORMATION

Acute Health Effects

Ingestion: Ingestion is unlikely through normal use. However, swallowing large amount of this product may cause immediate or delayed abdominal discomfort and may cause metabolic alkalosis, cyanosis and hypernatremia.

It is not recommended to repeatedly swallow this material.

Eye: In the event that any dose of this material or the dust comes into contact with the eyes it may have an immediate or delayed irritating effect resulting in redness and watering or an infection.

It is not recommended to repeatedly allow this material to come into contact with the eyes.

Skin: Any level of skin contact with this product and/or their dusts may lead to immediate or delayed skin irritations and in susceptible people with sensitive skin, dermatitis or skin infection.

It is not recommended for people susceptible to skin irritations to repeatedly allow this material to come into contact with the skin.

Inhalation: Inhalation of large amounts of dust from this product may have an immediate or delayed effect to irritate, inflame or sensitise the nose, throat and lungs, and exacerbate pre-existing conditions such as asthma and bronchitis.

It is not recommended for people to repeatedly inhale this material.

Chronic Health Effects

The repeated inhalation of dust from these products may lead to respiratory irritation, inflammation or sensitisation and illnesses such as asthma and bronchitis. Chronic over ingestion may cause metabolic alkalosis, cyanosis and hypernatremia however the effects are in most cases reversible.

Contact with this product outside of intended use in not recommended.

12 | ECOLOGICAL INFORMATION

Ecotoxicity: The No Observed Effect Concentration (NOEC) in fish and aquatic invertebrates were higher than 1000mg/l. Ecotoxicity is considered low according to the United Nations Environment Program (UNEP).

Persistence/Degradability: Non-persistent and degradable

Mobility: Not applicable

13 | DISPOSAL CONSIDERATIONS

Disposal Methods: If possible accumulated dust should be removed using wet cleaning methods, or High Efficiency Particulate Air (HEPA) filter vacuum methods. Suitable landfill or facility with an approval to reuse this material.

Special Precautions for Landfill or Incineration: Not relevant
14 | TRANSPORT INFORMATION

UN Number: None allocated
Proper Shipping Name: None allocated
Class and Subsidiary Risk(s): Not applicable
Packing Group: Not applicable
Special Precautions for User: Not applicable
Hazchem Code: Not applicable
Other special storage or transport information: Transport in a covered container and avoid exposure to wind to prevent dust released into surroundings

15 | REGULATORY INFORMATION

None applicable

16 | OTHER INFORMATION

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Position: Sales and Marketing Director
Query Telephone: 02 9792 2733 (Business hours)
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END OF SDS