



# HASA ALKALINITY UP

## Safety Data Sheet

**HASA ALKALINITY UP**  
Safety Data Sheet (SDS No. 209)


Emergency 24 Hour Telephone: **CHEMTREC 800.424.9300**

Corporate Headquarters: Hasa Inc.  
P. O. Box 802736  
Santa Clarita, CA 91355  
Telephone • 661.259.5848  
Fax • 661.259.1538

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

|       |   |  |
|-------|---|--|
| 1.1   | <b>Product Identification:</b>  |  |
| 1.1.1 | <b>Product Name:</b>  | HASA ALKALINITY UP   |
| 1.1.2 | <b>CAS #</b> (Chemical Abstracts Service Registry Number):            | 144-55-8   |
| 1.1.3 | <b>EINECS</b> (European Inventory of Existing Commercial Substances): | 205-633-8  |
| 1.1.4 | <b>RTECS</b> (Registry of Toxic Effects of Chemical Substances):      | VZ0950000  |
| 1.1.5 | <b>Synonym:</b>   | Baking soda  |
| 1.1.6 | <b>Chemical Name:</b>   | Sodium Bicarbonate; Carbonic acid monosodium salt.   |
| 1.1.7 | <b>Chemical Formula:</b>  | NaHCO <sub>3</sub>   |
| 1.1.8 | <b>Chemical Family:</b>   | Inorganic sodium salt.   |
| 1.2   | <b>Recommended Uses:</b>  | Sodium bicarbonate can be added as a simple solution for raising the pH balance of water (increasing total alkalinity) where high levels of chlorine (2–5 ppm) are present as in swimming pools and aquariums. |
| 1.3   | <b>Company Identification:</b>  | Hasa Inc.<br>P. O. Box 802736<br>Santa Clarita, CA 91355   |
| 1.4   | <b>Emergency Telephone Number:</b>                                    | <b>CHEMTREC (24 Hour):</b><br>1-800-424-9300   |
| 1.5   | <b>Non-Emergency Assistance:</b>                                      | 661-259-5848<br>(8 AM – 5 PM PST / PDT)  |

**SECTION 2: HAZARD(S) IDENTIFICATION**

|                                 |   |
|---------------------------------|---|
| <b>Hazard Category</b>          | Acute Toxicity (Inhalation): Category 4   |
| <b>Symbol</b>                   |   |
| <b>Signal Word</b>              | Warning   |
| <b>Hazard Statements</b>        | Harmful if inhaled.   |
| <b>Precautionary Statements</b> | <b>Prevention</b>   |
|                                 | Avoid breathing dust. Use only outdoors or in a well-ventilated area.   |
|                                 | <b>Response</b>   |
|                                 | <b>IF INHALED:</b> Remove person to fresh air and keep comfortable for breathing.<br>Call a POISON CENTER or doctor if you feel unwell. |

**SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS**

| Ingredient         | Synonym     | CAS No.  | Weight % |
|--------------------|-------------|----------|----------|
| Sodium Bicarbonate | Baking Soda | 144-55-8 | 100%     |

**SECTION 4: FIRST AID MEASURES**

|     |                               |  |
|-----|-------------------------------|--|
| 4.1 | <b>IF IN EYES</b>             | <ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>  |
| 4.2 | <b>IF ON SKIN OR CLOTHING</b> | <ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>  |
| 4.3 | <b>IF INHALED</b>             | <ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>  |
| 4.4 | <b>IF SWALLOWED</b>           | <ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul> |

**HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

**NOTE TO PHYSICIAN**

Probable mucosal damage may contraindicate the use of gastric lavage.

**SECTION 5: FIRE FIGHTING MEASURES**

|      |  |   |
|------|--|---|
| 5.1  | <b>Flammability:</b>                                   | Nonflammable.                                   |
| 5.2  | <b>Auto-Ignition Temperature:</b>                      | Not applicable.                                 |
| 5.3  | <b>Flash Point:</b>                                    | Not applicable.                                 |
| 5.4  | <b>Flammable Limits:</b>                               | Not applicable.                                 |
| 5.5  | <b>Extinguishing Media:</b>                            | Water, water fog, carbon dioxide, dry chemical. |
| 5.6  | <b>Products of Combustion:</b>                         | None.   |
| 5.7  | <b>Fire Hazards in Presence of Various Substances:</b> | None.   |
| 5.8  | <b>Sensitivity To Impact:</b>                          | None.   |
| 5.9  | <b>Sensitivity To Static Discharge:</b>                | None.   |
| 5.10 | <b>Special Fire-fighting Procedures:</b>               | None.   |

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

|     |                                   |   |
|-----|-----------------------------------|---|
| 6.1 | <b>Personal Precautions:</b>      | Refer to Section 8 "Exposure Controls / Personal Protection".   |
| 6.2 | <b>Spill:</b>                     | This product, if spilled, can be recovered and re-used if contamination does not present a problem. Vacuum or sweep up the material. If the spilled product is unusable due to contamination, consult state or federal environmental agencies for acceptable disposal procedures and locations. See Section 13 "Disposal Considerations". |
| 6.3 | <b>Notification Requirements:</b> | Federal regulations do not require notification for spills of this product. State and local regulations may contain different requirements; consult local authorities.  |

**SECTION 7: HANDLING AND STORAGE**

|     |                  |   |
|-----|------------------|---|
| 7.1 | <b>Handling:</b> | Do not breathe dust. Do not get in eyes, on skin, or on clothing. |
| 7.2 | <b>Storage:</b>  | Protect from excessive heat and moisture. Store away from acids.  |

| <b>SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION</b> |  |   |
|---|--|---|
| 8.1   | <b>Engineering Controls:</b>                       | Where possible, provide general mechanical and/or local exhaust ventilation to prevent release of airborne dust into the work environment.  |
| 8.2   | <b>Personal Protection:</b>                        |   |
|   | 8.2.1 <b>Eyes:</b>                                 | Safety glasses with side shields.   |
|   | 8.2.2 <b>Respiratory:</b>                          | Whenever dust in the worker's breathing zone cannot be controlled with ventilation or other engineering means, workers should wear respirators or dust masks approved by NIOSH/MSHA, or comparable certification organization to protect them against airborne dust.  |
|   | 8.2.3 <b>Skin &amp; Body:</b>                      | Dry product is generally non-irritating to intact skin. However, this product can be irritating where skin has been damaged and can create skin irritation after long exposures when moisture is present. Under such conditions, gloves and long-sleeved clothing are recommended to minimize skin contact. |
|   | 8.2.4 <b>Hands:</b>                                | Protective rubber gloves.   |
| 8.3   | <b>Exposure Limits:</b>                            |   |
|   | 8.3.1 <b>Additional Guidelines:</b>                | Federal guidelines treat the ingredient(s) in this product as a nuisance dust, as no product-specific guidelines have been issued for exposure. As with all nuisance dusts, worker breathing zone concentrations should be measured by validated sampling and analytical methods.                           |
|   | 8.3.2 <b>Particulates Not Otherwise Regulated:</b> | OSHA (PEL / TWA): <ul style="list-style-type: none"> <li>▪ 15 mg/m<sup>3</sup> (total dust)</li> <li>▪ 5 mg/m<sup>3</sup> (resp fraction)</li> </ul> MSHA (PEL / TWA): 10 mg/m <sup>3</sup> (total dust)  |

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

|      |  |                                      |
|------|--|--------------------------------------|
| 9.1  | <b>Appearance:</b>                                     | White crystalline solid or granules. |
| 9.2  | <b>Odor:</b>   | Odorless.                            |
| 9.3  | <b>Odor Threshold:</b>                                 | No information available.            |
| 9.4  | <b>pH:</b>   | ~8.2 (1% solution)                   |
| 9.5  | <b>Melting Point:</b>                                  | Decomposes without melting.          |
| 9.6  | <b>Freezing point:</b>                                 | No information available.            |
| 9.7  | <b>Boiling Point &amp; Boiling Range:</b>              | No information available.            |
| 9.8  | <b>Flash Point:</b>                                    | No information available.            |
| 9.9  | <b>Evaporation Rate:</b>                               | No information available.            |
| 9.10 | <b>Flammability (solid, gas):</b>                      | Not flammable                        |
| 9.11 | <b>Upper / Lower Flammability or Explosive Limits:</b> | No information available.            |
| 9.12 | <b>Vapor Pressure:</b>                                 | Not applicable.                      |
| 9.13 | <b>Vapor Density:</b>                                  | Not applicable.                      |
| 9.14 | <b>Relative Density (Specific Gravity):</b>            | 62 lb/ft <sup>3</sup> (Bulk density) |
| 9.15 | <b>Solubility in Water:</b>                            | 8.6 g/100 ml water                   |
| 9.16 | <b>Partition Coefficient: (n-octanol / water):</b>     | No information available.            |
| 9.17 | <b>Auto-ignition Temperature:</b>                      | No information available.            |
| 9.18 | <b>Decomposition Temperature:</b>                      | No information available.            |
| 9.19 | <b>Molecular Weight:</b>                               | 84 g/mole                            |
| 9.20 | <b>Viscosity:</b>                                      | No information available.            |

**SECTION 10: STABILITY AND REACTIVITY**

|      |  |   |
|------|--|---|
| 10.1 | <b>Stability:</b>                      | Stable under normal use and storage conditions.   |
| 10.2 | <b>Instability Temperature:</b>        | Decomposes at approx. 60 °C   |
| 10.3 | <b>Conditions of Instability:</b>      | Incompatible materials, moisture.<br>Stable in dry air, but slowly decomposes in moist air.<br>Dangerous reaction with mono ammonium phosphate or a sodium-potassium alloy. |
| 10.4 | <b>Incompatibility:</b>                | Reacts with acids to release carbon dioxide gas and heat.   |
| 10.5 | <b>Corrosivity:</b>                    | Not corrosive in presence of glass.   |
| 10.6 | <b>Special Remarks on Reactivity:</b>  | None  |
| 10.7 | <b>Special Remarks on Corrosivity:</b> | None  |
| 10.8 | <b>Polymerization:</b>                 | Will not occur.   |

**SECTION 11: TOXICOLOGICAL INFORMATION**

|        |   |  |
|--------|---|--|
| 11.1   | <b>Routes of Entry:</b>   | Eyes, nose, ingestion, inhalation.   |
| 11.2   | <b>Acute Toxicity:</b>  |  |
| 11.2.1 | <b>Eye:</b>   | The material was minimally irritating to unwashed eyes and practically non-irritating to washed eyes (rabbits).  |
| 11.2.2 | <b>Skin:</b>  | Not a skin irritant or dermally toxic. Not a contact sensitizer.   |
| 11.2.3 | <b>Dermal (LD<sub>50</sub>):</b>  | Data not available.  |
| 11.2.4 | <b>Oral (LD<sub>50</sub>):</b>  | 7.3 g/kg (rats)  |
| 11.2.5 | <b>Inhalation (LC<sub>50</sub>):</b>  | > 4.74 mg/l.   |
| 11.2.6 | <b>Target Organs:</b>   | None   |
| 11.3   | <b>Acute Effects from Overexposure:</b>   | This product, when dry, is generally non-irritating to intact skin. However, when moisture is present, it can be irritating to damaged skin and can create irritation after long exposures. This product is approved for use as a food ingredient and is Generally Recognized As Safe (GRAS). No significant acute toxicological effects expected. |
| 11.4   | <b>Chronic Effects from Overexposure:</b>   | Based on published studies on its effects in animals and humans, sodium bicarbonate is not teratogenic or genotoxic. Only known subchronic effect is that of a marked systemic alkalosis.  |
| 11.5   | <b>Carcinogenic [Cancer Potential] Information:</b>                                       |  |
| 11.5.1 | <b>NTP</b> (National Toxicological Program 6 <sup>th</sup> Annual Report on Carcinogens): | Not Listed.  |
| 11.5.2 | <b>IARC</b> (International Agency for Research on Cancer Monographs, V. 1-100):           | Not Listed.  |
| 11.5.3 | <b>OSHA</b> (Occupational Safety & Health Administration):                                | Not Listed.  |
| 11.5.4 | <b>ACGIH</b> (American Conference of Governmental Industrial Hygienists):                 | Not Listed.  |
| 11.5.5 | <b>Proposition 65 (California only):</b>  | See Section 15.2.1   |

**SECTION 12: ECOLOGICAL INFORMATION**

|      |   |   |
|------|---|---|
| 12.1 | <b>Ecotoxicity:</b>                               | Culex sp. Larvae or mosquito (48-hour LC <sub>50</sub> ) = 2000 mg/L  |
| 12.2 | <b>Chemical Fate:</b>                             | No data available for the product.  |
| 12.3 | <b>Bioaccumulation:</b>                           | Bioaccumulation is not likely to occur since this material is highly soluble in water.                      |
| 12.4 | <b>Thermal Decomposition:</b>                     | Decomposes (without melting) into Na <sub>2</sub> CO <sub>3</sub> , H <sub>2</sub> O, and CO <sub>2</sub> . |
| 12.5 | <b>Toxicity of the Products of Decomposition:</b> | Not toxic.  |

**SECTION 13: DISPOSAL CONSIDERATIONS**

When this product is discarded or disposed of, as purchased, it is neither a characteristic nor a listed hazardous waste according to US Federal RCRA regulations (40 CFR 261). As a non-hazardous waste the material may be disposed of in a landfill in accordance with government regulations; check local or state regulations for applicable requirements prior to disposal. Any processing, usage, alteration, chemical additions to, or contamination of, the product may alter the disposal requirements. Under Federal regulations, it is the generator's responsibility to determine if a waste is a hazardous waste.

**SECTION 14: TRANSPORT INFORMATION**

|      |   |                |
|------|---|----------------|
| 14.1 | <b>US D.O.T.</b>  | Not regulated. |
| 14.2 | <b>Canada TDG</b> (Transportation of Dangerous Goods)   | Not regulated. |
| 14.3 | <b>ICAO</b> (International Civil Aviation Organization)   | Not regulated. |
| 14.4 | <b>IMO</b> (International Maritime Organization) <b>IMDG</b> (International Maritime Dangerous Goods) <b>Code</b> | Not regulated. |

**SECTION 15: REGULATORY INFORMATION**

| <b>15.1 U.S. Regulations:</b>                |  |   |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
|--|--|---|------------------------|---|---------------|--|---------|-------------------|-----------------------------|------------------------|-----------------------|---------------|--------------------|--------------|------|------|---|-----|-----------|------|------|-----------|-----|-------------|------|------|-----|---|
| 15.1.1                                       | <b>OSHA HAZCOM</b> (Hazard Communication)  | Not regulated under the HAZCOM Standard (29 CFR 1910.1200)      |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| 15.1.2                                       | <b>OSHA PSM</b> (Process Safety Management)  | Not regulated under PSM Standard (29 CFR 1910.119)              |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| 15.1.3                                       | <b>EPA FIFRA</b> (Federal Insecticide, Fungicide and Rodenticide Act)  | Not regulated as a pesticide.                                   |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| 15.1.4                                       | <b>EPA CEPCLA</b> (Comprehensive Environmental Response Compensation And Liability Act)  | RQ: Not applicable. (40 CFR 302.4)                              |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| 15.1.5                                       | <b>EPA TSCA</b> (Toxic Substance Control Act)  | Listed on the inventory.  |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| 15.1.6                                       | <b>EPA RCRA</b> (Resource Conservation and Recovery Act)   | Not regulated. (40 CFR 261)                                     |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| 15.1.7                                       | <b>EPA RMP</b> (Risk Management Plan)  | Not regulated. (40 CFR 68.130)                                  |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| <b>15.2 State of California Regulations:</b> |  |   |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| 15.2.1                                       | <p><b>Safe Drinking Water and Toxic Enforcement Act of 1986 [Proposition 65, California only]:</b><br/>           This product has been evaluated by one of the manufacturers for compliance with California's Proposition 65. Several sodium bicarbonate samples of various product grades have been evaluated. Results of these tests indicate that exposure to this sodium bicarbonate product does not pose a significant risk of causing cancer or reproductive toxicity. Even though the manufacturer is confident no significant risk is present in this product, you are notified that the following listed chemicals are contained in at a detectable level. This will assist you in evaluating your products and any obligations you may have under the law. The impurities shown below contain the indicated concentrations of chemicals listed by California as a chemical known to cause cancer (A) or reproductive toxicity (B). Also disclosed below are Non Significant Risk Levels (NSRL) for Proposition 65 carcinogens in regulation (Sections 25705 and 25709), in units of micrograms per day (µg/day). These levels provide "safe harbor" for persons subject to the Act, and do not preclude the use of alternative levels that can be demonstrated by their users as being scientifically valid. NSRLs represent the daily intake level calculated to result in a cancer risk of one excess case of cancer in 100,000 individuals exposed over a lifetime.</p> <table border="1"> <thead> <tr> <th>Product</th> <th>Prop. 65 Chemical</th> <th>Average Concentration (ppm)</th> <th>Detectable Limit (ppm)</th> <th>Prop 65 NSRL (µg/day)</th> <th>Listed Effect</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Sodium Bicarbonate</td> <td>Arsenic (As)</td> <td>0.13</td> <td>0.10</td> <td>0.06 (inhalation)<br/>10 (except inhalation)</td> <td>A&amp;B</td> </tr> <tr> <td>Lead (Pb)</td> <td>0.32</td> <td>0.20</td> <td>15 (oral)</td> <td>A&amp;B</td> </tr> <tr> <td>Nickel (Ni)</td> <td>0.21</td> <td>0.05</td> <td>0.8</td> <td>A</td> </tr> </tbody> </table> |   |                        |   |               |  | Product | Prop. 65 Chemical | Average Concentration (ppm) | Detectable Limit (ppm) | Prop 65 NSRL (µg/day) | Listed Effect | Sodium Bicarbonate | Arsenic (As) | 0.13 | 0.10 | 0.06 (inhalation)<br>10 (except inhalation) | A&B | Lead (Pb) | 0.32 | 0.20 | 15 (oral) | A&B | Nickel (Ni) | 0.21 | 0.05 | 0.8 | A |
| Product                                      | Prop. 65 Chemical  | Average Concentration (ppm)                                     | Detectable Limit (ppm) | Prop 65 NSRL (µg/day)                       | Listed Effect |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| Sodium Bicarbonate                           | Arsenic (As)   | 0.13  | 0.10                   | 0.06 (inhalation)<br>10 (except inhalation) | A&B           |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
|  | Lead (Pb)  | 0.32  | 0.20                   | 15 (oral)                                   | A&B           |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
|  | Nickel (Ni)  | 0.21  | 0.05                   | 0.8   | A             |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| 15.2.2                                       | <b>CalARP</b> (California Accidental Release Prevention):  | Not regulated.  |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| 15.2.3                                       | <b>CDPR</b> (California Department of Pesticide Regulation):   | Reg. #:10897-50001-AA (Spray adjuvant - California only)        |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| <b>15.3 Canada Regulations:</b>              |  |   |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| 15.3.1                                       | <b>WHMIS</b> (Workplace Hazardous Materials Information System):   | Not Controlled. Does not meet criteria of WHMIS classification. |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |
| 15.3.2                                       | <b>DSL</b> (Domestic Substances List)  | The substance is specified on the public Portion of the DSL.    |                        |   |               |  |         |                   |                             |                        |                       |               |                    |              |      |      |   |     |           |      |      |           |     |             |      |      |     |   |



| <b>SECTION 16: OTHER INFORMATION</b> |  |   |  |
|--------------------------------------|--|---|--|
| 16.1                                 | <b>HMIS III</b> (Hazardous Materials Identification System): |   |  |
|                                      | 16.1.1   | <b>HEALTH</b>   | <b>0</b>                                 |
|                                      | 16.1.2   | <b>FLAMMABILITY</b>   | <b>0</b>                                 |
|                                      | 16.1.3   | <b>PHYSICAL HAZARD</b>  | <b>0</b>                                 |
|                                      | 16.1.4   | <b>Personal Protection:</b>                                     | See Section 8                            |
| 16.2                                 | <b>NFPA 704</b> (National Fire Protection Association):      |   |  |
|                                      | 16.2.1   | <b>HEALTH</b>   | <b>0</b>                                 |
|                                      | 16.2.2   | <b>FLAMMABILITY</b>   | <b>0</b>                                 |
|                                      | 16.2.3   | <b>INSTABILITY</b>  | <b>0</b>                                 |
|                                      | 16.2.4   | <b>SPECIAL</b>  | <b>None</b>                              |
| 16.3                                 | <b>International Fire Code/ International Building Code.</b> |   | No information.                          |
| 16.4                                 | <b>ANSI</b> (American National Standards Institute):         |   |  |
|                                      | 16.4.1   | <b>Hazardous Industrial Chemicals - MSDSs-Preparation:</b>      | Complies with <b>ANSI Z400.1 – 2004.</b> |
|                                      | 16.4.2   | <b>Hazardous Industrial Chemicals - Precautionary Labeling:</b> | Complies with <b>ANSI Z129.1 – 2006.</b> |



**Note: The information contained herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge and belief. NO WARRANTY OR GUARANTEE**, express or implied, is made regarding the product performance, product stability, or as to any other condition of use, handling, transportation, and storage. Customer use, handling, transportation, and storage may involve additional safety and/or performance considerations. Our technical personnel will be happy to respond to questions regarding safe handling, storage, transportation, and use procedures. The safe handling, storage, transportation, and use procedures remain the sole responsibility of the customer. No suggestions for handling, storage, transportation, or use are intended as or to be construed as recommendations which may infringe on any existing patents or violate any Federal, State, and/or local law and/or regulation, ordinance, standard, etc. This Safety Data Sheet has been prepared by HASA, Inc. staff from test reports and other information available in the public domain.