



# Safety Data Sheet



## 10BF GAS DRY MAX Chemical Desiccant

### Section 1 – Product and Company Information

Date: March 14, 2014 Rev. D

**Product Name:** 10 BF / Gas Dry Max Chemical Desiccant  
**Chemical Family:** Inorganic Alkaline Metal Chloride  
**Catalog Numbers:** 33-0318, 33-0232, 33-0366, 33-0228, 33-0378, 33-0345, & 33-0393  
**Product Use:** Industrial: Deliquescent desiccant to reduce moisture content of Compressed Natural Gas, Compressed Air and other Compressed Gasses

**Company Identification:** Van Air Systems / Van Gas Technologies  
 2950 Mechanic Street, Lake City, PA USA  
 16423-2095  
 E-mail: [info@vanairsystems.com](mailto:info@vanairsystems.com)  
[www.vanairsystems.com](http://www.vanairsystems.com) / [www.vangastech.com](http://www.vangastech.com)

**Emergency Telephone Number:** 800-840-9906  
**Customer Service Telephone Number:** 814-774-2631

### Section 2 – Hazard Identification

**Color:** White to gray-white  
**Physical state:** Solid Tablets  
**Odor:** Odorless  
**Classification of substance or mixture**  
 GHS Classification [EC Regulation No 1272/2008 and US OSHA regulations]  
 Acute Toxicity, Category 4  
 Eye Irritant, Category 2  
 Skin Irritant, Category 2  
 EC Classification according to 67/548/EEC OR 1999/45/EC [DSD/DPD]  
 Xn, R22, Xi, R36, R38

**Emergency Overview:** Avoid contact with skin and eyes. Avoid breathing dust. Avoid ingestion. Wash thoroughly with cold water after handling.

**Signal Word:** **Warning!**

**Hazard Pictogram:**



**Potential Health Effects:** Harmful if swallowed  
 Will cause skin, serious eye and / or respiratory irritation.

**Health Hazards (acute and chronic):** None known.  
 Carcinogenicity: Not available  
 NTP: Not available  
 IARC Monographs: Not available  
**Signs and Symptoms of Exposure:** Skin dryness due to desiccant action. Ingestion of large amounts may cause vomiting, diarrhea and prostration.

### Section 3 – Composition / Information on Ingredients

(Alkali chloride salt / Lithium Chloride / CAS 7447-41-8 / Lithium Chloride Anhydrous  $\geq$  98%)

REACH Reg No. Not available  
 EC Index No. Not available  
 10BF / Gas Dry Max does not contain hazardous ingredients.

10BF / Gas Dry Max does not contain any substances found on the following EPA regulations:

- a. "Extremely Hazardous Substances"
- b. "CERCLA Hazardous Substances"
- c. "Toxic Substances"

#### Section 4 - First Aid Measures

<b>Eyes:</b>	Flush with water for at least 15 minutes. If irritation persists, consult a Physician.
<b>Skin:</b>	Remove contaminated clothing / shoes. Wash with soap and water. Treat for dry skin.
<b>Inhalation:</b>	Move person to fresh air. If irritation persists, consult a Physician.
<b>Ingestion:</b>	Consult a Physician immediately. Do NOT induce vomiting unless directed to do so. If victim is conscious and alert, give 1-2 glasses of water.
<b>Note to Physician:</b>	This product has low oral, dermal, and inhalation toxicity and is a mild irritant. Treatment is removal of exposure followed by symptomatic and supportive care.

#### Section 5 – Fire Fighting Measures

<b>Flammable Properties:</b>	Non-flammable
Flash Point:	Not applicable.
Method Used:	Not applicable
<b>Flammability Limits:</b>	Not applicable.
LEL:	Not applicable.
UEL:	Not applicable.
<b>Fire Fighting Instructions:</b>	Non-combustible.
<b>Extinguishing Media:</b>	Not applicable.
<b>Unusual Fire and Explosion Hazards:</b>	None known

#### Section 6 – Accidental Release Measures

<b>Personal precautions:</b>	Before cleanup begins, review entire SDS with attention to section 2 and section 8.
<b>Small/Large Spills:</b>	Sweep, shovel or vacuum for disposal.
<b>Waste Disposal Method:</b>	Treat tablets as ordinary non-combustible solid waste. Dispose of at a qualified waste disposal facility according to local, Federal and all applicable laws and regulations. Solution is non-toxic and will not support plant or marine life. Do not wash into drains.

#### Section 7 – Handling and Storage

<b>Handling:</b>	Tablets are non-toxic. Minimize dust generation and use with adequate ventilation. NIOSH respiratory protection as needed for nuisance dust. Avoid contact with eyes and skin. Do not ingest. Clean clothing before reuse.
<b>Storage:</b>	Observe all applicable laws when storing this product. Store in cool dry place. Keep away from strong acids. Keep containers tightly closed since material is hygroscopic. Repair damaged containers. Wash thoroughly after handling.

#### Section 8 – Exposure Controls and Personal Protection

<b>Engineering controls:</b>	Provide good local ventilation. Facility should be equipped with quick drench eye wash station and safety shower.
<b>Exposure Limits:</b>	None listed
<b>Personal Protective Equipment (PPE)</b>	
<b>Respirators:</b>	Use NIOSH, EN 149, MSHA approved or CEN Class P Type respirator if engineering controls are not adequate to protect against dust.

<b>Hands and Feet:</b>	Nitrile/Neoprene/PVC/Natural Rubber gloves recommended. Not to be used as the absolute basis for glove selection. Actual in use performance must be evaluated due to the many factors associated with proper glove selection. Chemical / slip resistant safety shoes.
<b>Eye Protection:</b>	Chemical safety goggles are recommended.
<b>Other Protective Clothing &amp; Equipment:</b>	Clean, body-covering skin protective clothing.
<b>Work/Hygienic Practices:</b>	Wash thoroughly with soap and water after handling

### Section 9 – Physical and Chemical Characteristics

Appearance and Odor:	White to gray-white solid tablet, size – 1" X 3/4", odorless.
Bulk Density:	60 ± 3 lbs/cubic foot
Vapor Pressure (mm Hg):	Not applicable.
Melting Point:	Loses water of hydration @ 241-244°F
Vapor Density (Air=1):	Not applicable.
Solubility in Water:	% by wt. @ 25°C (77°F): 45.4 Readily soluble.
Evaporation Rate (Butyl Acetate=1):	Not applicable.
Boiling Point:	> 1355°C

### Section 10 – Stability and Reactivity

Stability (Conditions to avoid):	Stable under normal temperatures and pressures. Avoid exposure to atmosphere; tablets will attract water.
Hazardous Decomposition Products:	None
Incompatibility (Materials to avoid):	Acids.
Hazardous Polymerization:	Will not occur under normal temperatures and pressures.
Conditions to Avoid:	Extreme heat and contact with incompatible chemicals (lithium, bromine tri-fluoride)

### Section 11 – Toxicological Information

Acute toxicity:	Category 4  Oral: LD50, rat 526 mg/kg Dermal: LD50, rabbit 2000 mg/kg Inhalation: LC50, rat 5.57 mg/L
Skin corrosion/irritation:	Skin irritant category 2, slight irritant (rabbit)
Serious eye damage/irritation:	Eye irritant category 2, moderate irritant (rabbit)
Respiratory or Skin Sensitization:	No classification
Non-sensitizing (guinea pig)	
Repeated Dose Toxicity:	Dose levels producing any effects in animals were many times higher than dose levels expected from exposure due to use.
Developmental Toxicity:	Did not cause birth defects or any other fetal effects in laboratory animals.
Genetic Toxicology:	In vitro genetic toxicity studies were negative.
Carcinogenicity:	Germ cell mutagenicity – based on the available data the classification criteria are not met. Carcinogenicity – Based on the available data the classification criteria are not met. Reproductive toxicity – Based on the available data the classification criteria are not met.

Carcinogenicity Listings – Not listed

Specific target organ toxicity (STOT) – Single exposure – No classification; criteria not met.

Specific target organ toxicity (STOT) – Repeated exposure – No classification; criteria not met.

Aspiration hazard – No classification; criteria not met.

## Section 12 - Ecological Information

Fish Acute and Prolonged Toxicity:	LC50, bluegill ( <i>Lepomis macrochirus</i> ) : 8,350-10,650 mg/l
Aquatic Invertebrate Acute Toxicity:	LC50, water flea ( <i>Daphnia magna</i> ) : 759-3,005 mg/l
Toxicity to Micro-Organisms:	EC50; activated sludge, respiration inhibition: >1,000 mg/l
Chemical Fate Information: Eco toxicity: No classification	No product information is available.
Rainbow trout:	96 hr LC50 = 158 mg/l
Daphnia magna:	48 hr. EC50 = 249 mg/l
Persistence and degradability:	No data available for the material
Bio accumulative potential:	No data available for the material
Mobility in the soil:	No data available for the product
Results for the PBT and vPvB assessment:	No data available
Other adverse effects:	None

## Section 13 – Disposal Considerations

Waste Disposal: All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. The information presented here pertains only to the product as shipped in its intended condition as described in SDS section 3.

EPA Waste Number: Not Applicable.

## Section 14 – Transport Information

U.S. Department of Transportation (D.O.T.) Not regulated as dangerous goods.

IATA: Not regulated as dangerous goods. Per IATA DGR

UN Number: None

Packaging group: None

Environmental hazards: Based on available data, the classification criteria are not met.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: None

Environmental Hazards: Based on available data, the classification criteria are not met.

Transportation of Dangerous Goods (TDG – Canada)

Class:	D
Division:	2B (Skin and Eye irritant)
Group:	Not Regulated
PIN Number:	Not Regulated

Other: Secure product with suitable hold down devices during shipment in dry containers (avoid moisture)

## Section 15 – Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

OSHA Hazard Communication Standard: This product is a “Non-Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and community Right-To-Know Act of 1986) Sections 311 and 312

EU: German Wassergefährdungsklasse (water hazard class): 1

International inventory status:

EINECS (EU): Listed

TSCA (US): Listed

ECL (Korea): Listed

DSL (Canada): Listed

Chemical Safety Assessment: The chemical safety assessment has not been completed for this mixture.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and community Right-To-Know Act of 1986) Section 313: to the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List: To the best of our knowledge, this product does not contain chemical at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product contains no listed substances known to the state of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

U.S. Toxic Substances Control Act: All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements under 40 CFR 720.30.

CEPA- Domestic Substances List (DSL): all substances contained in this product are listed on the Canadian Domestic Substances list (DSL) or are not required to be listed.

## Section 16 – Other Information

**HMIS RATING (estimated)-** Health: 1 Flammability: 0 Reactivity: 0

**NFPA RATING (estimated)-** Health: 1 Flammability: 0 Reactivity: 0

List of R-phrases: Harmful if swallowed, R22  
Irritating to eyes, R36  
Irritating to skin, R38

Personal Protective Rating: B Legend: N.A. – Not Applicable, N.E. – Not Established, N.D. - Not Determined.

Recommended Uses and Restrictions: This product is designed to be used as a desiccant material for compressed air and gas. If your intended use is consistent with our stated uses(s), contact our technical sales department.

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