



Material Safety Data Sheet

An explanation of the terms used herein may be found in OSHA 29 CFR 1910.1200, available from OSHA regional or area offices.

I. Product Identification

Company Name: Emerson Climate Technologies Flow Control

Address: 11911 Adie Road
Maryland Heights, MO. 63043

Tel. No.: 866-625-8416

Product Name: Refrigerant Dehydrators

Chemical Name: Sodium/Potassium/Alumino Silicate/Steel/Fiberglass/Copper

Synonyms: Filter Driers/Driers/Filters

Chemical Formula: Na₂O/K₂O/MgO/Al₂O₃/SiO₂/Al (H₂PO₄)₃

Chemical Family: Molecular Sieve/Aluminum Oxide/Aluminum Phosphate

Trade Names: ADK, EK, BOK, BFK, ASD, ASF, SFD, TFD, ASK, H-48, H-42, H-100, ALF, F-48, F-100, BTAS, D48, W48, UK-48, UK-100, F-100.

II. Hazardous Ingredients of Mixtures

A complex of elements and compounds composed of material shown below.

Material	(CAS/TSCA #)	Weight %	1988-1989 ACGIHTLV-TWA (OSHA-PEL)
Sodium Oxide	1313-59-3	<2	Non Established
Potassium Oxide	12136-45-7	<2	Non Established
Magnesium Oxide	1309-48-4	<10	Mg/m ³ fume (10 mg/m ³ fume total)
Aluminum Oxide	1344-28-1	<90	10 mg/m ³ as Al (10 mg/m ³ total dust)
Silicon Oxide	7631-86-9	<50	10 mg/m ³ (6 mg/m ³)

III. Physical Data

Boiling Point: 760 mm Hg NA
Specific Gravity: (h₂O=1) NA
Vapor Density: (air=1) NA

Freezing Point: NA
Vapor Pressure: 20°C NA
Solubility In Water % By Weight: NA

Percent Volatiles Evaporation Rate By Volume: NA (BUTY1 Acetate=1) NA

Appearance & Odor: Product may appear as block style or in hermetic shell

IV. Health Hazard Data

Threshold Limit Value: See Section II

Effects of Single (Acute) Overexposure

Swallowing: No evidence of adverse effects from available information

Skin Absorption: No evidence of adverse effects from available information

Inhalation: May cause irritation of the nose and throat, accompanied by cough and chest discomfort

Skin Contact: May cause irritation of the nose and throat, accompanied by cough and chest discomfort.

Eye Contact: May cause irritation seen as local redness and/or burns.

Effects of Repeated (Chronic) Overexposure: Prolonged inhalation may cause lung damage.

Other Effects of Overexposure: None Currently known.

Medical Conditions Aggravated by Overexposure: Breathing of dust may aggravate asthma and inflammatory or fibrotic pulmonary disease.

Emergency & First Aid Procedures:

Swallowing: If ingested in large quantities, then drink 2 glasses of water. Induce vomiting if the patient is conscious.

Skin Contact: Wash the contacted area with soap and water.

Inhalation: Remove the person to fresh air.

Eye Contact: Immediately flush eyes with water for at least 15 minutes.

V. Fire and Explosion Hazard Data

Flash Point: Does not burn.

Auto Ignition Temperature: Not applicable.

Flammable Limits: Not flammable

Extinguishing Media: Unused material will not burn. Use media appropriate for surrounding fire.

Special Fire Fighting Procedures:

Depends on the use of the material. Used material may contain products of a hazardous nature. The user of this product must identify the hazards of the retained material and inform the fire fighters of these hazards.

Fire & Explosion Hazards:

In their fresh state driers are not flammable. However, the used hermetic driers may contain refrigerant under high pressure. Precautions must be taken to avoid pressure releases.

VI. Reactivity Data

Stability: Stable under normal conditions.

Conditions to Avoid: The used hermetic driers can contain refrigerant under pressure. Remove sealing caps slowly on resealed driers.

Incompatibility: Sudden contact with strong acids such as hydrochloric acid and nitric acid.

Hazardous Decomposition:

It is possible that oils can be retained in the drier. It is reasonable to expect that decomposition products will come from these retained materials of use. The driers themselves do not readily decompose unless subjected to extreme temperature or chemical conditions. If such decomposition did occur the products would include the mix of oxides listed in Section II.

Hazardous Polymerization: Will not occur.

VII. Spill or Leak Procedures

Steps to be Taken if Material is Released or Spilled: Sweep the spill area. Collect and place the spilled material in a waste disposal container.

Waste Disposal Method:

Discard any product (including any retained materials of use), disposable container or liner in an environmentally acceptable manner, in full compliance with federal, state and local regulations.

VIII. Special Protection Information

Respiratory Protection: A NIOSH/MSHA approved respirator for protection against dust, mist or vapor is recommended for operations when the permissible exposure limit might be exceeded.

Ventilation

Local Exhaust: Local exhaust ventilation is recommended for operations where the permissible exposure limit might be exceeded.

Mechanical: Not applicable. See local exhaust.

Special: Not applicable. See local exhaust.

Other: Not applicable. See local exhaust.

Protective Gloves: Use gloves to avoid prolonged skin contact.

Eye Protection: Safety glasses or goggles selected as per OSHA 29 CFR 1919.133.

Other Protective Equipment: Select in accordance with OSHA 1910.132 and 1910.133.

IX. Regulatory Information

U.S. Federal Regulations:

Under the TSCA rules for mixtures and naturally occurring substances the EPA considers this product to be a statutory mix, therefore, only its component oxides or metals shown in Section II of this MSDS are in the inventory. The human and environmental hazards are, however, not the summation of the hazards of the components because the components do not separate from the product. The hazards discussed in this MSDS are based on the product as a whole.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III:

Requires emergency planning based on Threshold Planning Quantities (TPQ's) and release reporting based on Reportable Quantities (RQ's) in 40 CFR 355 (used for SARA 302, 304, 311 and 312).

There are no components present in this product at a level which could require reporting under the statute. This MSDS sheet is form informational purposes and should be kept on file.

Revision Date: 2/05/08