

Syn^{thetic}**EX**othermics

Demag4

MAGNESIUM REMOVAL FLUX

Demag4 is designed to remove magnesium from molten aluminum.

Product Appearance

Unlike most Synex fluxes, **Demag4** is light grey in color. All materials in Synex **Demag4** are of the highest quality available. The high quality materials are custom compacted to keep the product granularity very tight.

Product Purpose

Demag4 optimizes effective removal of magnesium and by association some sodium present in molten metal. This product contains no HEX, making it user and facility friendly.

Product Usage

Demag4 is most effective when rabbled into the metal as the metal is being stirred in the furnace. It can be injected with all injection flux machines. The amount of **Demag4** needed is determined by the amount of magnesium to be removed. Normal operation practices is to use 5 to 8 lbs of **Demag4** for every pound of magnesium to be removed.

To order or receive additional product information call:

Synthetic Exothermic, Inc.
One Madison St.
Newnan, Georgia 30263

Tel. - (770)253-7652
Fax - (866)894-4254
www.synex-flux.com/

High Tech Fluxes for Today's Metals

Synthetic Exothermic, Inc. fluxes are of the highest quality and conform with all Synex specifications. Purchaser must read and adhere to all safety handling warnings. Due to the fact that Synex has no control of the purchaser's usage, Synex makes nor implies any warranties as to the specific results the purchaser may achieve.

Synthetic EXothermics

Synthetic Exothermics
One Madison Street
Newnan, Georgia 30263

770-253-7652
fax 866-894-4254

date 4/17/08

HEALTH: 2 ISSUE DATE 02/12/01
FLAMMABILITY: 0 REACTIVITY: 0

PRODUCT IDENTIFICATION:

Product name: Demag4
Chemical Name: sodium aluminum tetrafluoride
Chemical Formula: NaAlF₄

SUMMARY OF HAZARDS

Eye irritant May cause skin irritation
Toxic by ingestion See "Chronic Effects of Overexposure"
Causes irritation to respiratory tract See "Other Health Effects"

HAZARDOUS COMPONENTS

Chemical Name	Cas. No.	Note	Exposure Limit
sodium aluminum tetrafluoride	13821-15-3	ND	Fluorides 2.5 mg/M3 TWA8 (OHSA/ACIH).
Aluminum	7429-90-5	ND	10 mg/M3 as metal dust and oxide (ACIH); 5 mg/M3 as welding fume (OSHA/ACIH) 15 mg.M3 as metal dust (OHSA).

CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE/ODOR: light gray powder/slight odor
VAPOR PRESSURE: <1.0 mm Hg @ 25C/77F
MELTING POINT: 675-720 C (Range)

FIRE AND EXPLOSION HAZARDS

FLASH POINT (METHOD): Non-flammable.
FLAMMABLE LIMITS: Not applicable.
EXTINGUISHING MEDIA: Dry chemical, water spray (fog), foam or carbon dioxide.
HAZARDOUS THERMAL DECOMPOSITION PRODUCTS: include fluoride fumes.
SPECIAL FIRE FIGHTING PROCEDURES: Avoid breathing smoke or fumes.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

PRODUCT NAME sodium aluminum tetrafluoride

page2
msds
Demag4

REACTIVITY DATA

STABILITY: Stable.

CONDITIONS TO AVOID: None known.

MATERIALS TO AVOID: Strong acids.

HAZARDOUS POLYMERIZATION: Will not occur.

HEALTH HAZARDS

INHALATIONS: May cause irritation. Fluoride may be absorbed into the body through the respiratory tract.

EYE CONTACT: eye irritant.

SKIN CONTACT: Expected to be a skin irritant. Repeated or prolonged skin contact may cause defatting and dermatitis.

INGESTIONS: toxic and irritating to the gastrointestinal tract.

CHRONIC EFFECTS OF OVEREXPOSURE: this compound contains a fluoride component. Repeated or prolonged overexposure can cause bone density changes. Literature data indicate dental fluorosis caused by this component has been shown in the laboratory animal and that hypocalcemia (reduction of the blood calcium below normal) may occur.

OTHER HEALTH EFFECTS: May aggravate existing respiratory conditions.

EMERGENCY FIRST AID PROCEDURES

INHALATIONS: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

SKIN CONTACT: Wash contaminated areas with soap and water.

INGESTION: Induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Get medical attention.

NOTE TO PHYSICIAN: For persons frequently exposed to dust, annual medical examination should include a measurement of urinary fluoride. Urinary fluoride concentrations should not exceed (4 ppm/4.0 mg/L) on a pre-shift basis (after at least two days of off-work) and (7 ppm/7.0 mg/L) on a post-shift basis (during the work week).

EXPOSURE CONTROL INFORMATION

EXPOSURE LIMITS : see "Hazardous components" section.

EYE PROTECTION: chemical goggles.

RESPIRATORY PROTECTION: NIOSH approved dust/mist respirator.i

PROTECTIVE GLOVES: Resistant to chemical penetration.

LOCAL EXHAUST VENTILATION: at source of dust.

MECHANICAL VENTILATION: recommended.

OTHER: if skin contact or contamination of clothing is likely,i protective clothing should be worn.

ENVIRONMENTAL PROTECTION

SPILLS OR LEAKS: Sweep or shovel spills into appropriate container for disposal.

DISPOSAL METHODS: to the best of Synex's knowledge, this product is not regulated by CERCLA/RCRA as a hazardous waste or material. However, this product has not been tested for the toxicity characteristic via the Toxicity Characteristic Leaching Procedure. Therefore, it may be acceptable to good waste management practice and in compliance with applicable local, state and federal regulations. However, we strongly recommend disposal of this product in a chemically secure landfill.

STORAGE REQUIREMENTS: Store away from intense heat and strong acids. Keep dry.

REGULATORY INFORMATION

TSCA: This material is in compliance with the toxic substances control act (15 USC 2601-2629).i

DOT DESCRIPTION/PROPER SHIPPING NAME: Not regulated for transportation.

HAZARD CATEGORIES FOR SARA 311/312 REPORTING ARE INDICATED BELOW:

HEALTH	Immediate (Acute)	Yes
HEALTH	Delayed (Chronic)	Yes
PHYSICAL	Fire	No
PHYSICAL	Reactive	No
	Nuisance Mist/Dust Only	No

COMPONENT NAME	CAS NO.	PERCENTAGE	REGULATION
Carbon Black	1333-86-4	0.3	Prop 65-CA1
Aluminum	7429-90-5	1.5	Sara 313

NJ RTK PA.RTK

THIS MSDS CONTAINS AT LEAST THE INFORMATION REQUIRED BY THE FEDERAL OSHA HAZARD COMMUNICATION RULE.29 CFR 1910.1200(g) (2).

~~~~~

*THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, EXPRESSED OR IMPLIED, EXCEPT THAT IT IS ACCURATE TO THE BEST KNOWLEDGE OF SYNEX, INC.*

**SYNEX, INC.** ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THIS DATA.