

Syn^{thetic}EX^{othermic}s

BA309

BILLET CASTING FLUX

BA309 is Synex's brass-billet casting fluxes which works well on 360 type alloys. The casting temperature used is 1800-1950F . **BA309** is designed to protect billets from oxidation as they are being cast. Its chemical properties do an excellent job of removing unwanted oxides and slag from molten metal. **BA309** lubricates the mold as the drop is made to produce a superior surface finish. **BA309** will reduce inclusions in your castings.

PRODUCT APPEARANCE

Like all Synex fluxes, **BA309** is snow white in color and has the consistency of powdered sugar. All materials in Synex **BA309** are of the highest quality available anywhere. The high quality materials are custom blended to keep the product granularity very tight, which prevents them from becoming unblended during shipment.

PRODUCT PURPOSE

BA309 is effective in providing atmospheric protection of the molten metal during casting. It also provides proper lubricity for direct chill casting.

PRODUCT USAGE

BA309 does an excellent job increasing the fluidity of the metal thus improving the cast surface finish of the slabs. **BA309** can be applied both molten and dry onto the casting molds. Apply **BA309** onto the top of the metal as you are casting the slab.

To order or receive additional product information and samples 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 purchasers usage, Synex makes nor implies any warranties as to the specific results the purchaser may achieve.

date prepared 40/17/2008

PRODUCT NAME

BA309 brass-bronze flux

SECTION I - PRODUCT IDENTITY

Manufacturer's name: **Synex, Inc.**

EMERGENCY TELEPHONE: 770-253-7652, FAX 866-894-4254

address: **Synthetic Exothermics**, Inc; One Madison Street, Newnan, Georgia 30263

Chemical name: brass flux trade name and synonyms: **BA309A**

PRODUCT IDENTIFICATION

Chemical Name: Inorganic Salts

Chemical Family: Fluorides

Formula: Mixture NFPA/HMIS: Health -3, Fire -0, Reactivity-0, Specific hazard

SECTION II HAZARDOUS INGREDIENTS/ IDENTITY INFORMATION

Hazardous Components

Specific Chemical Identity:

OSHA PEL ACGIH TLV

CAS NO. 16893-85-9 20-50%

Fluorides as potassium silicofluoride

2.5mg/m3 2.5mg/m3

CAS NO. 16871-90-2 20-50%

Nuisance Dust Respirable

5mg/m3 5mg/m3

Total Dust

15mg/m3 10mg/m3

SECTION III - PHYSICAL PROPERTIES

molecular weight:nd

specific gravity(water=1):nd

melting point (deg. F):1750-2250F

boiling point (deg. C):na

water solubility (wt.%)

volatiles (wt.%)nd

vapor pressure (mmhg):na

vapor density (air =1):na

evaporation rate: nd

appearance and odor: white crystalline powder.

SECTION IV- FIRE AND EXPLOSION HAZARD DATA

Flash point (method used): nd flammable limits: nd

extinguishing media: this product is not considered flammable, nor will it support combustion

special fire fighting procedures: wear respirator for fluorides

unusual fire and explosion hazards: fumes of F₂ may be given off

SECTION V- REACTIVITY DATA

stability: unstable stable X factors promoting instability:

hazardous polymerization: will not occur incompatibility: acid, acidferous vapors

avoid contact with: acids or high temperatures except under controlled conditions. Avoid dampness. Keep container closed

Store in dry place

hazardous decomposition products: fumes of F₂ may be given off when heated to decomposition.

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na= not applicable nd= not determined unk=unknown

SECTION VI- HEALTH HAZARD INFORMATION

CHEMICAL HEALTH HAZARD RATING:

HEALTH =3 (high)
FIRE = 0 (least)
REACTIVITY = 0 (least)
CHRONIC = *

Routes of Entry Inhalation? yes Skin? yes Ingestion? yes

Health Hazards (acute and chronic):

Prolonged exposure to skin may lead to irritation. Prolonged inhalation may cause mucous membrane and respiratory system irritation. Harmful or fatal if ingested.

Carcinogenicity: NO NTP? No IARC monographs? No OSHA Regulated? No

Medical conditions generally aggravated by exposure. - Respiratory irritant.

Chronic lung damage, scar tissue development in lungs can occur over extended period.

Emergency and First Aid Procedures-

Skin Contact- Flush liberally with flowing water for at least 15 minutes.

Eye Contact- Flush liberally with flowing water or physiological NaCl solution. When Flushing eyes, Lids should be kept open.

Inhalation. Remove to fresh air. In case of breathing difficulties, give oxygen.

In any of the above situations, call a physician.

SECTION VII - ENVIRONMENTAL PROTECTION PROCEDURES

release or spill response: use clean up method which minimizes airborne dust and avoid contamination to outplant streams.

waste disposal method: properly label waste container.

SECTION VIII- SPECIAL PROTECTION INFORMATION

hands (glove material to minimize contact): avoid skin contact.

eyes: avoid eye contact. Use goggles.

respirator type: use NIOSH approved respirator when tlv is exceeded.

ventilation requirements: local exhaust required.

other: safety shower and/or eye wash should be available

SECTION IX - SPECIAL PRECAUTIONS

special precautions in handling and storing: wash after handling store in dry area.

shipping regulations: none labels required: none

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