

Syn^{thetic}EX^{othermic}

ZN291

ZINC DROSSING/COVER FLUX

ZN291 is Synex's best zinc drossing/cover flux. Designed to clean molten zinc, its special chemical formulation removes unwanted oxides and nonmetallics. **ZN291** not only melts at a lower temperature than zinc, but also goes through an exothermic reaction of its own. This exothermic reaction drives suspended zinc droplets out of the dross, helping to provide a dry, powdery dross while controlling metal loss.

Product Appearance

Like all Synex fluxes **ZN291** is snow white in color and has the consistency of powdered sugar. All of the materials in Synex **ZN291** are of the highest quality available. The high quality materials are custom blended to keep the product granularity very tight, which prevents them from becoming unblended during shipment.

Product Purpose

ZN291 effectively removes zinc oxides and nonmetallic buildup from molten metal baths. **ZN291** also effectively removes aged buildup from uncleaned furnace walls, which extends the life of the furnace.

Product Usage

ZN291 is most effective when it is used to cover the zinc bath and allowed to sit for a short time. Once rabbled into the metal, it will form a dry, powdery dross that can be removed quickly and easily. **ZN291** also removes oxide buildup from furnace walls, which restores the full melt capacity of the unit. The amount of product needed is determined by the normal operating environment of the furnace. The recommended amount is about three to five oz. of **ZN291** for every hundred pounds of metal.

To order or to receive additional product information, contact us at:

Synthetic Exothermic, Inc.
7652

One Madison St.
Newnan, Georgia 30263

Tel. - (770)253-

Fax - (770)253-7685
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.

date prepared 4/16/2008

PRODUCT NAME

ZN291 ZINC 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: **zinc flux** trade name and synonyms: **zn291**

PRODUCT IDENTIFICATION

Chemical Name: Inorganic Salts

Chemical Family: Chlorides, Carbonates, Fluorides

Formula: Mixture NFPA/HMIS: Health -2, Fire -0, Reactivity-0, Specific hazard

SECTION II HAZARDOUS INGREDIENTS/ IDENTITY INFORMATION

Hazardous Components

Specific Chemical Identity: Common Name(s): OSHA PEL ACGIH TLV

Fluorides as Cryolite 2.5mg/m3 2.5mg/m3

(CAS NO. 13775-53-6, less than 10%)

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):800-850 boiling point (deg. C):na

water solubility (wt.%) 8.5gr/LT 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 F_2 and NaF 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.

hazardous decomposition products:fumes of F, Cl, and NaO_2 may be
given off when heated to decomposition.

=====

na= not applicable nd= not determined unk=unknown

SECTION VI- HEALTH HAZARD INFORMATION

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: not known to be a carcinogenic
NTP? No IARC monographs? No OSHA Regulated? No
Medical conditions generally aggravated by exposure. - None Known

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:nd

~~~~~  
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.