# GUIDE METALS (POWDERS, DUSTS, SHAVINGS, BORINGS, TURNINGS, OR CUTTINGS, ETC.)

# **POTENTIAL HAZARDS**

ERG2004

#### FIRE OR EXPLOSION

- May react violently or explosively on contact with water.
- Some are transported in flammable liquids.
- May be ignited by friction, heat, sparks or flames.
- Some of these materials will burn with intense heat.
- Dusts or fumes may form explosive mixtures in air.
- Containers may explode when heated.
- May re-ignite after fire is extinguished.

## HEALTH

- Oxides from metallic fires are a severe health hazard.
- Inhalation or contact with substance or decomposition products may cause severe injury or death.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

# PUBLIC SAFETY

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- As an immediate precautionary measure, isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids.
- Stay upwind.
- Keep unauthorized personnel away.

## **PROTECTIVE CLOTHING**

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

# EVACUATION

## Large Spill

Consider initial downwind evacuation for at least 50 meters (160 feet).

#### Fire

• If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

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## **EMERGENCY RESPONSE**

#### FIRE

#### • DO NOT USE WATER, FOAM OR CO<sub>2</sub>.

- Dousing metallic fires with water may generate hydrogen gas, an extremely dangerous explosion hazard, particularly if fire is in a confined environment (i.e., building, cargo hold, etc.).
- Use DRY sand, graphite powder, dry sodium chloride based extinguishers,  $G\text{-}1^\circ$  or Met-L-X  $^\circ$  powder.
- Confining and smothering metal fires is preferable rather than applying water.
- Move containers from fire area if you can do it without risk.

#### Fire involving Tanks or Car/Trailer Loads

• If impossible to extinguish, protect surroundings and allow fire to burn itself out.

#### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.

#### FIRST AID

- Move victim to fresh air. Call 911 or emergency medical service.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

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