

# MATERIAL SAFETY DATA SHEET

15602

Required under USDL Safety and Health Regulations for Ship Repairing,  
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

## SECTION I

### CHEMICAL NAME AND SYNONYMS

Cobalt Oxide

### TRADE NAME AND SYNONYMS

Cobalt Oxide 70-71%

### CHEMICAL FAMILY

Inorganic Metallic Salt

### FORMULA

Co<sub>2</sub>O<sub>3</sub>

## SECTION II - HAZARDOUS INGREDIENTS

| PAINTS, PRESERVATIVES, & SOLVENTS                                                                                          | % | TLV<br>(Units) | ALLOYS AND METALLIC COATINGS              | % | TLV<br>(Units) |
|----------------------------------------------------------------------------------------------------------------------------|---|----------------|-------------------------------------------|---|----------------|
| PIGMENTS                                                                                                                   |   |                | BASE METAL                                |   |                |
| CATALYST                                                                                                                   |   |                | ALLOYS                                    |   |                |
| VEHICLE                                                                                                                    |   |                | METALLIC COATINGS                         |   |                |
| SOLVENTS                                                                                                                   |   |                | FILLER METAL<br>PLUS COATING OR CORE FLUX |   |                |
| ADDITIVES                                                                                                                  |   |                | OTHERS                                    |   |                |
| OTHERS                                                                                                                     |   |                |                                           |   |                |
| HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES                                                                      |   |                |                                           | % | TLV<br>(Units) |
| Not presently established, however TLV for cobalt metal, dust and<br>fumes is 0.1 mg/m <sup>3</sup> as cobalt (1982 ACGIH) |   |                |                                           |   |                |

## SECTION III - PHYSICAL DATA

|                                        |           |                                       |       |
|----------------------------------------|-----------|---------------------------------------|-------|
| BOILING POINT (°F.)                    | N.A.      | SPECIFIC GRAVITY (H <sub>2</sub> O=1) | 5.18  |
| VAPOR PRESSURE (mm Hg.)                | N.A.      | PERCENT, VOLATILE<br>BY VOLUME (%)    | N.A.  |
| VAPOR DENSITY (AIR=1)                  | N.A.      | EVAPORATION RATE<br>(_____ =1)        | N.A.  |
| SOLUBILITY IN WATER                    | Insoluble | Decomposes at                         | 895°C |
| APPEARANCE AND ODOR Black, gray powder |           |                                       |       |

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

|                                    |       |                  |      |     |     |
|------------------------------------|-------|------------------|------|-----|-----|
| FLASH POINT (Method used)          | N.A.  | FLAMMABLE LIMITS | N.A. | Lel | Uel |
| EXTINGUISHING MEDIA                | Water |                  |      |     |     |
| SPECIAL FIRE FIGHTING PROCEDURES   | None  |                  |      |     |     |
| UNUSUAL FIRE AND EXPLOSION HAZARDS | None  |                  |      |     |     |

## SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE Not presently established, however TLV for cobalt metal, dust and fumes is 0.1 mg/m<sup>3</sup> as cobalt (1982 ACGIH)

PERCENTAGE OF OVEREXPOSURE

May cause local dermatitis which is relieved when removed. Toxicity due to ingestion is low.

### EMERGENCY AND FIRST AID PROCEDURES

Ingestion-induce vomiting by giving two glasses of water and sticking finger down throat and call a Physician. Never give anything by mouth to an unconscious person. Inhalation-remove to fresh air-may give oxygen. Call a Physician

## SECTION VI - REACTIVITY DATA

|                                      |                |   |                     |
|--------------------------------------|----------------|---|---------------------|
| STABILITY                            | UNSTABLE       |   | CONDITIONS TO AVOID |
|                                      | STABLE         | X |                     |
| INCOMPATIBILITY (Materials to avoid) |                |   |                     |
| None expected                        |                |   |                     |
| HAZARDOUS DECOMPOSITION PRODUCTS     |                |   |                     |
| None expected                        |                |   |                     |
| HAZARDOUS POLYMERIZATION             | MAY OCCUR      |   | CONDITIONS TO AVOID |
|                                      | WILL NOT OCCUR | X |                     |
| None expected                        |                |   |                     |

## SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Contain the spill. Pick up the spill in a container for disposal. Flush area with water.

WASTE DISPOSAL METHOD

Dispose in accordance with Federal, State and Local laws.

## SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

|                                                     |                      |                |
|-----------------------------------------------------|----------------------|----------------|
| VENTILATION                                         | LOCAL EXHAUST        | SPECIAL        |
|                                                     | MECHANICAL (General) | OTHER          |
| PROTECTIVE GLOVES                                   |                      | EYE PROTECTION |
| Rubber or impervious coating                        |                      | Goggles        |
| OTHER PROTECTIVE EQUIPMENT                          |                      |                |
| If in dusty situation, wear an approved respirator. |                      |                |

## SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep container closed. Protect against

physical damage. Avoid contact with skin, eyes, and clothing.

OTHER PRECAUTIONS

Avoid breathing and use only with adequate ventilation.

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