



## I - PRODUCT IDENTIFICATION AND USE

MSDS ID: 2918851

PRODUCT NAME: ALUMINUM BRIGHTENER 645

USE: Acid Cleaner

## SUPPLIER:

JohnsonDiversey Canada, Inc.  
2401 Bristol Circle  
Oakville Ontario, L6H 6P1, Canada

## EMERGENCY PHONE:

1-800-668-7171

WHMIS CLASSIFICATION: D2B E

CHEMICAL FAMILY: Acid

TRADE NAME / SYNONYMS: not applicable

CHEMICAL NAME: not applicable

## II - HAZARDOUS INGREDIENTS

| HAZARDOUS INGREDIENT                    | % w/w | CAS #       | LD50 / LC50     | Route / Species |
|-----------------------------------------|-------|-------------|-----------------|-----------------|
| Oxalic acid                             | 7-13  | 000144-62-7 | LD50 375 mg/kg  | oral/rat        |
| Linear alcohol ethoxylate / propoxylate | 1-5   | 068154-97-2 | LD50 2000 mg/kg | oral/rat        |

## III - HANDLING AND DISPOSAL PROCEDURES

## PERSONAL PROTECTIVE EQUIPMENT:

Gloves: Natural Rubber or Neoprene

Eye: safety goggles

Footwear: rubber boots

Respiratory: face mask NIOSH approved

Other: rubber apron

## SPECIAL HANDLING PROCEDURES AND EQUIPMENT:

Avoid eye and skin contact. Do not breathe mist or spray. Face mask with NIOSH approved chemical cartridge for organic vapours.

VENTILATION REQUIREMENTS: general ventilation

INCOMPATIBILITY (Material to Avoid): Alkaline or chlorinated materials.

SPILL PROCEDURES: Contain the spill. Do not allow the spilled product to go to drain. Mop up or soak up with absorbent clay for disposal. Wash spill area with large volumes of water.

WASTE DISPOSAL: Dispose according to municipal, provincial, and federal regulations.

STORAGE / SHIPPING REQUIREMENT: Store in a cool dry area in a closed container. Avoid freezing. UN3265

## IV - PHYSICAL PROPERTIES

APPEARANCE / ODOUR: Hazy colourless liquid - mild odour

S.G. / BULK DENSITY(g/cc): 1.05

pH: (concentrate) 2.0

VAPOUR PRESSURE (mmHg): not available

VAPOUR DENSITY (air=1): not available

ODOUR THRESHOLD: not available

BOILING POINT: approx. 100°C

FREEZING POINT: approx. 0°C

PERCENT VOLATILE: 85%

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE (water=1): &lt;1

## V - TOXICOLOGICAL PROPERTIES

## EFFECTS OF ACUTE EXPOSURE TO MATERIAL:

EYES: Corrosive. May cause severe irritation. May cause permanent damage if not treated promptly.

SKIN: Corrosive. May cause severe irritation. May cause temporary or permanent damage if not treated promptly.

INGESTION: Corrosive. May cause severe irritation of the digestive tract. Ingestion of large doses can be fatal.

INHALATION: Inhalation of spray or mist may cause respiratory irritation. May cause headache and nausea.

LD50 (calculated): 3275 mg/kg

LC50 (calculated): not available

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| <b>OTHER TOXIC EFFECTS:</b> Oxalic Acid TWA 1 mg/m3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                 |
| <b>EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:</b> none known                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                 |
| <b>VI - FIRST AID MEASURES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                 |
| <b>EYES:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Flush eyes with plenty of water for at least 15 minutes. Hold eyelids open while rinsing. Contact a physician immediately.                      |
| <b>SKIN:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Flush affected area thoroughly with water. If irritation persists, contact a physician.                                                         |
| <b>INGESTION:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Drink large volumes of water . Never give anything by mouth to an unconscious patient. Do not induce vomiting. Contact a physician immediately. |
| <b>INHALATION:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Remove patient to fresh air. Get medical attention for any breathing difficulty.                                                                |
| <b>VII - FIRE AND EXPLOSION DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                 |
| <b>FLAMMABLE:</b> No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                 |
| <b>FLASH POINT, °C:</b> not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>AUTO IGNITION TEMPERATURE, °C:</b> N/Ap                                                                                                      |
| <b>EXTINGUISHING MEDIA:</b> Water [X] Dry Chemical [X] Carbon Dioxide [X] Foam [X] Other [ ]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                 |
| <b>SPECIAL FIRE FIGHTING PROCEDURES:</b> not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                 |
| <b>HAZARDOUS COMBUSTION PRODUCTS:</b> Oxides of carbon.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                 |
| <b>EXPLOSIVE SENSITIVITY TO:</b> not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                 |
| <b>VIII - REACTIVITY DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                 |
| <b>STABILITY:</b> Stable [x] Unstable [ ]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                 |
| <b>CONDITIONS TO AVOID:</b> not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                 |
| <b>INCOMPATIBILITY (Material to Avoid) :</b> Alkaline or chlorinated materials.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                 |
| <b>HAZARDOUS DECOMPOSITION PRODUCTS:</b> not available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                 |
| <b>REACTIVITY:</b> not dangerously reactive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                 |
| <b>IX - MSDS PREPARATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                 |
| <b>SOURCES USED:</b> RTECS, ChemInfo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>PREPARED BY:</b> JohnsonDiversey Canada. Inc.<br>Regulatory Department<br>Industrial Division<br>Phone (905) 829-1200                        |
| <b>PREPARATION DATE:</b> April 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                 |
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