SDA34(REFRACTORY)

SECTION I PRODUCT INFORMATION

MANUFACTURES NAME: TYK CORPORATION

ADDRESS: 3-1 OHATA-CHOU, Tajimi City, Gifu pref, JAPAN, 507-8607

EMERGENCY PHONE NUMBER: 0572-22-8151

PERSONAL CONTACT: T.OJIMA

MSDS DATA: AUG. 2005

FORMULA: MIXTURE

PRODUCT CLASS: REFRACTORY

PHYSICAL DESCRIPTION: REDDISH ODORLESS SOLID

SECTION II HAZARDOUS INGREDIENTS & EXPOSURE

HAZARDOUS COMPONENT(S)	CAS#	mass%		LIMIT VALUES
ALUMINA	1344-28-1	85-90	TLV	10mg/m³ total dust
SILICA	14504-95-1	5-8	TLV	0.1mg/m³ respirable dust
ZIRCONIA	1314-23-4	2-5	TLV	5mg/m³ as Zr
CHROMIC OXIDE	1308-38-9	2	TLV	0.5mg/m³

SECTION III TYPICAL PHYSICAL PROPERTIES

BOILING POINT : NA VAPOR PRESSURE : NA VAPOR DENSITY : NA

SOLUBILITY IN WATER: NIL.

SPECIFIC GRAVITY: APPRENT - 2.84

% VALATILE / VOLUME : NA

PH: NA

AUTOIGNITION TEMPERATURE: NA

APPEARANCE AND ODOR: REDDISH ODORLESS SOLID

SECTION IV FIRE & EXPLOSION HAZARD DATA

FLASH POINT: NONFLAMMABLE

LOWER EXPLOSIVE LIMIT (LEL): NA UPPER EXPLOSIVE LIMIT (UEL): NA

EXTINGUISHING MEDIA: NA

SPECIAL FIRE FIGHTING PROCEDURE: NONE UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

SECTION V REACTIVITY DATA

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur

CODITIONS TO AVOID : NONE

INCOMPATIBILITY(material to avoid): NONE

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

SECTION VI HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY:

ANY DUST CREATED DURING INSTALLATION OR REMOVAL MAY BE INHALED.

TARGET ORGANS:

DUST, IF INHALED IN AMOUTS IN EXCESS OF OCCUPATIONAL EXPOSURE LIMITS OVER A REPEATED OR PROLONGED PERIOD OF TIME, LUNGS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

OVER EXPOSURE TO ANY DUST PRODUCED MAY AGGREVATE SUCH PRE-EXISTING PULMONARY DISEASES AS ASTHMA AND THOSE BRONCHITAL AND LUNG DISORDERS ASSOCIATED WITH THE SMOKING OF TABACCO.

EFFECTS OF OVEREXPOSURE:

EYE: DUST IS ABRASIVE AND MAY IRRITATE EYE BY MECHANICAL ABRASION.

SKIN: DUST IS ABRASIVE AND MAY IRRITATE SKIN BY MECHANICAL ABRASION.

INGESTION: NO KNOWN EFFECT BUT NOT RECOMMENDED.

INHALATION: DUST PRODUCES NUISANCE EFFECTS SUCH AS COUGHING.

WHEEZING, SHORTENESS OF BREATH AND NASAL

CONGESTION.

SUBCHRONIC, CHRONIC:

INHALATION OF DUST IN AMOUTS IN EXCESS OF OCCUPATIONAL EXPOSURE LIMITS OVER A REPEATED OR PROLONGED PERIOD OF TIME MAY, AS WITH ANY MINERAL DUST, PRODUCE A PNEUMOCONIOSIS.

SECTION VII APPLICABLE COTOROL MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: SAFETY GLASSES WITH SIDE SHIELDS.

SKIN PROTECTION:

LONG SLEEVED SHIRT AND LONG PANTS - NORMAL WORK CLOTHING.

RESPIRATORY PROTECTION:

IF DUST CREATED IN AMOUTS IN EXCESS OF OCCUPATIONAL EXPOSURE LIMITS USE MSHA OR OSHA RESPIRATOR APPROVED FOR PARTICULATES.

WORK PRACTICES:

AVOID THE CREATION OF DUST. HAZARD STATUS MAY BE CHANGED BY THE CONDITION OF USE. AVOID EXCESSIVE EXPOSURE TO ANY DUST PRODUCED DURING THE REMOVAL AND DISPOSAL OF THE USED REFRACTORY.

HANDLING AND STORAGE PRECAUTIONS:

NO SPECIAL PRECAUTIONS BUT KEEP DRY FOR THE BEST RESULTS. ENGNEERING CONTOROLS: NONE

SECTION WII FIRST AID

EYE CONTACT:

FLUSH EYE WITH LARGE AMOUTS OF WATER FOR AT LEAST 15MINUTES. DO NOT RUB EYE. SEEK MEDICAL HELP IF IRRITATTION PERSISTS.

SKIN CONTACT:

WASH OFF WITH SOAP AND WATER AVOIDING EXCESSIVELY HARD RUBBING. SEEK MEDICAL HELP IF IRRITATION PERSISTS.

INGESTION:

NO KNOWN EFFECT BUT NOT RECOMMENDED.

INHALATION:

REMOVE TO FRESH AIR AND PERFORM ARTIFICAL RESPIRATION IF NOT BREATHING.

SECTION IX SPILL OR LEAK PROCEDURES / WASTE DISPOSAL

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED PICK OR SCOOP UP AND REMOVE

WASTE DISPOSAL:

DISPOSE OF IN ACCORDANCE TO APPLICABLE LOCAL, STATE, AND FEDERAL RULES AND REGULATIONS AND AS THE FINAL USED CONDITION OF THE PRODUCT DICTATES. PACKAGING MATERIAL INCINERATE OR DISPOSE OF IN A SOLID WASTE LANDFILL.

SECTION X REGULATORY STATUS

The information above is believed to be accurate and represents the best information currently available to japan. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall TYK be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, even if TYK has been advised of the possibility of such damages.