

## MATERIAL SAFETY DATA SHEET

MSDS No. : 2009470 DATA PREPARED : 1-Dec-09

| IDENTITY : KB470 / Anti Human F3 Pc              | lyclonal Antibody  |                            |                            |  |  |
|--|--|----------------------------|----------------------------|--|--|
| 1. CHEMICAL PRODUCT AND COMPAN                   | Y IDENTIFICATION   |                            |                            |  |  |
| MANUFACTURER'S NAME                              | : TRANS GENIC INC.   |                            |                            |  |  |
| ADRESS   | : 7-1-14 Minatojimaminami-machi, Chuo-ku, Kobe, Japan 650-0047   |                            |                            |  |  |
| TELEPHONE NUMBER FOR INFORMATION                 |  |                            |                            |  |  |
| EMERGENCY TELEPHONE NUMBER                       | EMERGENCY TELEPHONE NUMBER : +81-78-306-0295   |                            |                            |  |  |
| 2. COMPOSITION / INFORMATION ON IN               | IGREDIENTS   | Т                          | I                          |  |  |
| CHEMICAL NAME                                    |  | CAS NUMBER                 | CONTENT                    | -  |  |
| Anti Human F3 Polyclonal Antibody                |  | -                          | -                          |  |  |
| Phosphate buffer solution                        |  | -                          | -                          |  |  |
|  |  |                            |                            |  |  |
|  |  |                            |                            |  |  |
| 3. HAZARDS IDENTIFICATION                        |  |                            |                            |  |  |
| EMERGENCY OVERVIEW                               | : White frozen mass Irritation of eyes   | and skin. May be barmf     | ul if inholed and indest   | ad a second s  |  |
| POTENTIAL HEALTH EFFECTS                         | . White hozen mass i mation of eyes  | and skin. May be namin     |                            | 5 <b>u</b> .   |  |
| ROUTE OF ENTRY                                   | : Inhalation; Yes, Skin; Yes, Ingestion;   | Yes.                       |                            |  |  |
| EYE CONTACT                                      | : May irritate and cause pain, tearing, reddings swelling and itching of the eyes.   |                            |                            |  |  |
| SKIN CONTACT                                     | : Hypersensitive individuals may experience allergic reactions and dermatologic reactions such as rash and hives.  |                            |                            |  |  |
| SKIN ABSORPTION                                  | : Prolonged exposure may result in the material being absorbed through skin in harm full amounts.  |                            |                            |  |  |
| INHALATION                                       | : Irritate to the eyes, nose, throat and lungs. It may also cause headaches and dizziness.   |                            |                            |  |  |
| INGESTION  | : May cause anorexia, headaches, bellyache, diarrhea, nausea, vomiting and fever.  |                            |                            |  |  |
| CARCINOGENICITY                                  | : NTP; Not listed, IARC; Not listed, OSHA; Not listed.   |                            |                            |  |  |
| 4. FIRST AID                                     |  |                            |                            |  |  |
| EYE CONTACT                                      | : Remove any contact lenses at once.   | Flush eyes well with floo  | ding amounts of runnin     | g water for at least 15 minutes.   |  |
|  | Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.  |                            |                            |  |  |
| SKIN CONTACT                                     | : Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal.   |                            |                            |  |  |
|  | If irritation persists, consult a physician.   |                            |                            |  |  |
| INHALATION                                       | : Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.   |                            |                            |  |  |
| INDIGESTION                                      | : Rinse mouth, give plenty of water or r   | nilk to dilute the substan | ce and induce vomiting     | . Consult a physician.   |  |
| 5. FIRE FIGHTING MEASURES                        |  |                            |                            |  |  |
| FLASH POINT                                      | : Not available.   |                            |                            |  |  |
| FLAMMABLE LIMITS                                 | : Not available.   |                            |                            |  |  |
|  | : Carbon dioxide, dry chemical powder, foam, water.  |                            |                            |  |  |
| FIRE & EXPLOSION HAZARDS                         | : Toxic, irritating fumes or smoke may be emitted.<br>: Firemen should wear normal protective equipments and positive-pressure self-contained breathing apparatus. |                            |                            |  |  |
| FIRE FIGHTING INSTRUCTIONS                       | : Firemen should wear normal protectiv   | e equipments and positi    | ve-pressure seif-contai    | ned breatning apparatus.   |  |
| 6. ACCIDENTAL RELEASE MEASURES                   | and the Table of a first state of the  |                            |                            | and the state of the state of the second state |  |
|  |  |                            |                            | completely picked up, wash the spill site with soap and disposal and seal it tightly. Remove, clean or dispose of  |  |
| contaminated clothing.                           |  | 3-33                       | p                          |  |  |
| 7. HANDLING AND STORAGE                          |  |                            |                            |  |  |
| Avoid contact with eyes, skin and clothing. Avo  | id prolonged or repeated exposure. Han   | dle material with suitable | protection.                |  |  |
| Store away from sunlight in a cold (-20 °C = -4k | (F) well- ventilated dry place. Keep conta   | ainer tightly closed.      |                            |  |  |
| 8. EXPOSURE CONTROLS / PERSONAL                  | PROTECTION   |                            |                            |  |  |
| ENGINEERING CONTROLS                             | : Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.   |                            |                            |  |  |
| VENTILATION                                      | : Local ExhaustNecessary, Mechanical (General)Necessary.   |                            |                            |  |  |
| PERSONAL PROTECTION                              | : Safety glasses, Chemical resistant gloves, Protective clothing, NIOSH / MSHA approved respirator.  |                            |                            |  |  |
| 9. PHYSICAL AND CHEMICAL PROPER                  | TIES   |                            |                            |  |  |
| APPEARANCE AND ODOR                              | : White frozen mass, MELTING POINT   | Not Available, BOILING     | POINTNot available,        |  |  |
| SPECIFIC GRAVITY                                 | : Not available, SOLUBILITY IN WATE  | RMiscible                  |                            |  |  |
| 10. STABILITY AND REACTIVITY                     |  |                            |                            |  |  |
| CHEMICAL STABILITY                               | : This material is stable under normal a   | and anticipated ambient s  | storage and handling co    | onditions.   |  |
| CONDITON TO AVOID                                | : Sunlight, heat.  |                            |                            |  |  |
| INCOMPATIBILITY (MATERIAL TO AVOID)              | ID) : Strong oxidizers, metals, acids, acid chlorides  |                            |                            |  |  |
| HAZARDOUS DEOMPOSITION PRODUCTS                  | : Carbon monoxide, nitrogen oxides, S  | ulfur oxides, phosphor o   | kides and sodium comp      | oounds may be formed.  |  |
| HAZARDOUS POLYMERIZATION                         | : Will not occur.  |                            |                            |  |  |
| 11. TOXICOLOGICAL INFORMATION                    |  |                            |                            |  |  |
| ACUTE EFFECTS                                    | : May be harmful by inhalation, indiges  | tion or skin absorption. T | he toxicological proper    | ties have not been thoroughly investigated.  |  |
| 12. ECOLOGICAL INFORMATION                       |  |                            |                            |  |  |
| Not available.                                   |  |                            |                            |  |  |
| 13. DISPOSAL CONSIDERATIONS                      |  |                            |                            |  |  |
| Disposal should be made in accordance with e     | kisting disposal practices employed for in   | nfectious waste at your in | nstitution. Observe all fe | ederal, state and local environmental regulation.  |  |
| 14. TRANSPORT INFORMATION                        |  |                            |                            |  |  |
| Not available.                                   |  |                            |                            |  |  |
| 15. REGULATORY INFORMATION                       |  |                            |                            |  |  |
| CautionSubstance not yet fully tested.           |  |                            |                            |  |  |
| 16. OTHER INFORMATION                            |  |                            |                            |  |  |
| This product is a chemical substance and is int  | ended to be used by persons having che   | emical knowledge and sk    | ill, as their own discreti | ion and risk.  |  |
| The above information is believed to be correct  |  | -                          |                            |  |  |

\*\* shall not be held liable for any damage resulting from handling or from contact with the above material.