

First issue: Jun. 1, 2009



Material Safety Data Sheet

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name A-Attachment MIX

Product Code TAK-301

SUPPLIER

Name Life Science Operations Department TOYOBO Co., Ltd. Address 2-8, Dojima-Hama 2-chome Kita-Ku, OSAKA 530-8230, JAPAN

Telephone No. +81-6-6348-3786 Fax No. +81-6-6348-3833

2 COMPOSITION / INFORMATION ON INGREDIENTS

Parts Name A-attachment Mix

Chemical Nature Solution

Components

Chemical Name Tris

(hydroxymethyl) aminomethane

CAS No. 77-86-1

Concentration 50mM or less

Chemical Name Enzyme&Antibody

CAS No.

Concentration <1%

Chemical Name Glycerol

CAS No. 56-81-5 Concentration 50%

3 HAZARDS IDENTIFICATION

Most Important Hazards Few adverse human health effects are anticipated.

Specific Hazards Not available

4 FIRST-AID MEASURES

Inhalation Remove to fresh air. Consult a physician immediately.

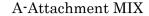
Skin Contact Immediately wash off with plenty of water. Consult a physician immediately.

Eye Contact Wash off with running water for more than 15 minutes. Consult a physician

immediately.

Ingestion Swill tepid water or milk for immediate vomiting. These treatments are emergency

first aid only. Consult a physician immediately.



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5 FIRE-FIGHTING MEASURES

Extinguishing Media Water spray, dry chemical powder, or carbon dioxide etc.

Protection of Firefighters The protection implement for breathing is worn in case of a big fire.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions Wear protective gear. Avoid an eye, the skin and clothes contact.

Environmental Precautions Although the influence on environment is small, it does not discard into environment.

7 HANDLING AND STORAGE

HANDLING

Technical Measures Wear protective gear, avoiding contact on eye, skin and clothes.

Equipment of eyewashing and washing is installed in near.

Precautions None specified Safe Handling Advice None specified

STORAGE

Technical Measures Store in the sampling tube.

Storage Conditions Store at about 4° C Incompatible Products None specified

Packaging Materials Use initial container for the product

8 EXPOSURE CONTROLS/ PERSONAL PROTECTION

ENGINEERING MEASURES Equipment of eyewashing and washing is installed in near.

Set local ventilation equipment.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection Self contained breathing apparatus Hand Protection Protecting glove(rubber glove etc.)

Eye Protection Safety goggles

Skin and Body Protection Long sleeve working wear

9 PHYSICAL AND CHEMICAL PROPERTIES

Parts Name A-attachment Mix

Physical State Liquid
Colour colourless
Odor None
pH 6 - 9

Boiling Point About 100 °C

Decomposition Temperature No information available Flash Point No information available

Density $1.0-1.2 \text{ g/cm}^3$

Solubility Easily miscible with water

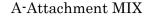
10 STABILITY AND REACTIVITY

Stability Stable under normal handling and storage conditions

Possible Hazardous Reactions None

Conditions to Avoid Not available

Material to Avoid Strong acids, strong alkalines and strong oxidizers



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11 TOXICOLOGICAL INFORMATION

Acute Toxicity Not available Local Effects Not available

12 ECOLOGICAL INFORMATION

Mobility Not available
Persistence/Degradability Not available
Bioaccumulation Not available

13 DISPOSAL CONSIDERATIONS

Waste from Residues Dispose of in accordance with all applicable local and

national laws and regulations.

Contaminated Packaging Dispose of in the same way as the material.

14 TRANSPORT INFORMATION

International Regulations

UN Classification Number Not classified

Follow all of the laws and regulations in your respective

Specific Precautions To prevent packages from breaking, handle with care.

15 REGULATORY INFORMATION

Follow all of the laws and regulations in your country.

16 OTHER INFORMATION

Notice The information in this MSDS, to the best of our knowledge,

is accurate and correct. However, TOYOBO makes no

warranty and assumes no liability whatsoever in connection

with any use of this information.

The MSDS is subject to revision as new information becomes

available.