Material Safety Data Sheet

1 Product name and Company information

Company name : Nippon Takkyu Co.,Ltd

Zip code : 101-0024

Address : 1-2-8 Kanda Izumi-Cyo, Chiyoda-Ku, Tokyo

Responsible Department: Planning department

Telephone no. : 03-3862-0911 FAX : 03-3862-0920 Emergency contact : Same as above Date of Issue or Revised : June 12, 2019

Product name FINE ZIP

2 Composition and Ingredients' Information

Single product/Mixture classification: Mixture

Chemical name : Acrylic copolymer aqueous emulsion

Ingredients and contents

Ingredient : Official Gazette Ref. No. CAS No.

Natural rubber : Not applicable Acrylic copolymer : 6-809

Ammonia : 1Class 314 1336-21-6

Water : Not applicable 7732-18-5 37%

3 Hazards and Toxicity Summary

Most important hazards : Although contains about 0.6% of ammonia, there is hardly any effect

on the environment at lower concentrations

Toxicity No special hazards

Ecological influence : No data Physical and chemical hazards : No data

Classification name : Does not correspond to classification standards

4 First aid measures

Inhalation Shift the victim immediately to fresh air. Keep warm and allow to rest.

Quickly seek medical assistance.

Skin contact Thoroughly clean with soap. In case of itching or irritation symptoms,

quickly seek medical assistance.

Eye contact Wash the face with clean water at least for 15 minutes, and seek

medical assistance.

Ingestion Thoroughly rinse the inside of the mouth with water, and immediately

seek medical assistance.

5 Fire-fighting measures

Fire extinguishing agents

Water, reinforced liquid, foam extinguisher, powder extinguishing agent etc Special fire-fighting methods Though this material is as such not flammable, the residual dry matter

after evaporation of water is combustible. During combustion, extinguish the fire using a fire extinguishing agent aiming at the fire source. Cool the surroundings by water spray to avoid risk of

spreading of fire.

Protection for fire-fighting Wear protective gears without fail during fire-fighting operation.

6 Leak measures

> Caution for human body To prevent exposure, carry out operation wearing protective gear, and

> > restrict entry of unauthorized personnel in the vicinity of leakage site.

Caution for environment Take precaution against discharge into public water regions, rivers, and

> lakes. In case of discharge, if required, immediately contact such as police station, fire station, local pollution control board, river management bureau, waterworks bureau, public health centre,

agricultural department and fishery department etc.

Removal methods For small amounts, mop up with cotton waste etc. For large quantities,

> as far as possible, collect the leaked liquid in tightly closed containers, and recover the residual liquid by absorbing with inactive absorbents

such as soil, sand, diatom earth, saw dust etc.

Prevention of secondary fire Quickly remove the nearby ignition sources, and arrange for fire

extinguishing materials.

Handling and Storage 7

Handling

Technological measures Handle in well-ventilated areas.

Safe handling precautions Wear suitable protective gear. Work as per related regulations.

Caution Provide thorough ventilation when handling indoors. When installing

ventilation equipment, use non-explosion type equipment.

Storage

Proper storage conditions Avoid freezing and sunlight, and keep indoors. Do not store below 5°C

or above 40°C. To prevent skin formation, tightly close after use, and

store.

8 Exposure controls and protective measures

Facilities Handle in places provided with sealed devices or equipments, or local

or full ventilation equipments.

Control concentration Not specified Not specified Permissible concentration Japan Association of No mention

Industrial Health Protective tools

Breathing protection Protective mask Protective gloves Hand protection

Protective goggles (usual type goggles, usual type goggles with side plate) Eye protection

Skin and body protection

Protective shoes, Long-sleeve protective clothing etc.

9 Physical and chemical properties

Physical state

Form Emulsion
Color Milky white

Specific temperature/temperature range where physical state changes

Boiling point About 100°C
Odour Ammonia odour

Flash point No data Specific gravity 0.97 (20°C)

10 Stability and Reactivity

Stability Stable under usual conditions of handling

Reactivity No reactivity
Hazardous decomposition products No data

11 Toxicity information

Acute toxicity No information Sensitization No information

12 Ecological influence methods

Decomposition No information at present
Accumulation No information at present
Fish toxicity No information at present

13 Disposal considerations

Entrust the treatment, by declaring the details of contents, to industrial waste treatment professionals permitted by municipal authorities. Waste liquid such as wash water etc., can be treated by flocculants, activated sludge etc. Further, comply with water pollution regulations, waste material processing and cleansing regulations. When disposing the containers, process as industrial waste or recover.

14 Transport

UN classification : Not applicable UN No. : Not applicable

IATA/ICAO : Not Dangerous Goods

Special safety measures and conditions of transport

Loading method : Ensure the lid of every container is tightly closed, and there are no

leaks. Load without any damages to the containers due to tumbling,

fall, friction etc., and ensure to prevent collapsing load.

Caution : Carry protective gear and fire extinguishers.

Applicable regulations 15

Chemical management promotion

Law

Industrial Safety and Health Law

Fire Protection Law Ship transportation and storage of : Not applicable

dangerous goods regulations

: Not applicable

: Only if solidifies, articles 3, 33, 34, article combustible solid matter

: Not applicable

Other information 16

Enquiry on this MSDS Nippon Takkyu Co.,Ltd

Since the evaluations of hazards and toxicity are not necessarily complete, handle with extreme caution.

This MSDS is required for using our products properly, and essential data are briefly compiled assuming usual conditions of handling.

Users should handle this product with their own responsibility while referring to this MSDS.

The information contained in this MSDS are based on the currently available data and the findings of the manufacturer, and no guarantee whatsoever is implied for these data or evaluations. Further, this MSDS is subject to revision based on the amendments to laws and new data.