SAFETY DATA SHEET

TECH RUB-O-MATIC



1. Product and company identification

: TECH RUB-O-MATIC **Product name**

: 704, 704G, 704-5G, 704-55G **Product code**

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

溶剤 (Solvent)

Supplier's details : Nippon Tech Incorporated

YCC Takeaway Bldg.5

2-21-43, Takanawa, Minato-ku Tokyo,

108-0074 JAPAN TEL: 03-5462-7321

Emergency telephone number (with hours of

operation)

: +(81)-345209637 24/7

2. Hazards identification

GHS Classification : FLAMMABLE LIQUIDS - Category 2

ACUTE TOXICITY: SKIN - Category 5

ACUTE TOXICITY: INHALATION - Category 4

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the

aquatic environment: 100%

GHS label elements

Hazard pictograms





Signal word : Danger

Hazard statements : Highly flammable liquid and vapor.

Harmful if inhaled.

May be harmful in contact with skin.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks,

> open flames and hot surfaces. - No smoking. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-

ventilated area. Avoid breathing vapor.

: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable Response

> for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Call a POISON CENTER or physician if you feel unwell.

Storage : Store in a well-ventilated place. Keep cool.

: Dispose of contents and container in accordance with all local, regional, national **Disposal**

and international regulations.

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2. Hazards identification

Other hazards which do not : None known.

result in classification

3. Composition/information on ingredients

Substance/mixture Other means of

identification

: Not available.

CAS number/other identifiers

CAS number : Not applicable. **ENCS** number : Not available. **ISHL** number : Not available.

Ingredient name	%	CAS number	ENCS	ISHL
solvent naphtha (petroleum blend), light	50 - 100	64742-89-8	Not available.	Not available.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower evelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

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4. First aid measures

Inhalation : Harmful if inhaled.

: May be harmful in contact with skin. Skin contact

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eve contact : No specific data. Inhalation : No specific data. Skin contact : No specific data. Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use dry chemical, CO₂, water spray (fog) or foam.

: Do not use water jet.

Specific hazards arising from the chemical

: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff

to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : No specific data.

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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6. Accidental release measures

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and wellventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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9. Physical and chemical properties

Appearance

Melting point

Physical state : Liquid.

Color Clear. [Light] Solvent. [Strong] Odor : Not available. **Odor threshold** Ha : Not applicable.

: 93.3 to 115.6°C (199.9 to 240.1°F) **Boiling point** : Closed cup: -7°C (19.4°F) [Tagliabue.] Flash point

: <-50°C (<-58°F)

Burning time Not applicable. **Burning rate** : Not applicable. **Evaporation rate** : >1 (butyl acetate = 1)

: Not available. Flammability (solid, gas) : Lower: 1.3% Lower and upper explosive (flammable) limits Upper: 8%

Vapor pressure : 5.3 kPa (40 mm Hg) [room temperature]

Vapor density Not available.

Relative density : 0.73

: Not available. Solubility : Not available. Solubility in water : Not available. Partition coefficient: n-

octanol/water

Decomposition temperature: Not available. **SADT** : Not available. **Auto-ignition temperature** : 280°C (536°F)

Viscosity : Kinematic (room temperature): 0.007 cm²/s (0.7 cSt)

10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

: Reactive or incompatible with the following materials: Incompatible materials

oxidizing materials

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

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11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
solvent naphtha (petroleum blend), light	LC50 Inhalation Gas.	Rat	3400 ppm	4 hours
	LD50 Dermal LD50 Oral	Rat Rat	>4000 mg/kg >8000 mg/kg	i i

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely : Not available.

routes of exposure

Potential acute health effects

Eye contact: No known significant effects or critical hazards.

Inhalation : Harmful if inhaled.

Skin contact : May be harmful in contact with skin.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

<u>Delayed and immediate effects and also chronic effects from short and long term exposure</u> <u>Short term exposure</u>

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11. Toxicological information

Potential immediate

effects

: Not available.

CHECIS

Potential delayed effects

: Not available.

Long term exposure

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General
 No known significant effects or critical hazards.
 Carcinogenicity
 No known significant effects or critical hazards.
 Mutagenicity
 No known significant effects or critical hazards.
 Teratogenicity
 No known significant effects or critical hazards.
 Developmental effects
 No known significant effects or critical hazards.
 Fertility effects
 No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Dermal Inhalation (gases)	2500 mg/kg 3400 ppm

12. Ecological information

Toxicity

Not available.

Persistence/degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

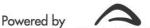
Mobility

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

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13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

	UN	IMDG	IATA
UN number	1993	1993	1993
UN proper shipping name	FLAMMABLE LIQUIDS, N.O.S. (solvent naphtha (petroleum blend), light)	FLAMMABLE LIQUIDS, N.O.S. (solvent naphtha (petroleum blend), light)	FLAMMABLE LIQUIDS, N.O. S. (solvent naphtha (petroleum blend), light)
Transport hazard class(es)	3	3	3
Packing group	II	II	II
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory information

Fire Service Law

Dangerous substance : Class 4: Type 1 petroleum **Designated** : Not available.

classes quantity

: Not available. Danger class

: Not available. **Designated quantity** : Not available. **Designated combustibles**

Substance to report : Not listed : Not listed Fire Service Law -

Obstructive materials

Maritime Safety Law

Notification Regulating Transportation of Dangerous Materials by Sea

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15. Regulatory information

None of the components are listed.

Container class

None of the components are listed.

ISHL

Use of specified chemical substances

None of the components are listed.

Lead regulation : Not listed

Label requirements

None of the components are listed.

Chemicals requiring notification

None of the components are listed.

Carcinogen

None of the components are listed.

Mutagen

None of the components are listed.

Corrosive liquid : Not listed

Occupational Safety and

Health Law

ISHL Prevention of : Not listed

: Flammable liquid Class 2

: Not listed

Tetraalkyl Lead Poisoning

ISHL Harmful Substances

Subject to Obtaining

Permission for Manufacturing

ISHL Harmful Substances. : Not listed

Prohibited for Manufacturing

ISHL Dangerous : Not listed

Substances

Chemical Substances Control Law (CSCL)

None of the components are listed.

Explosives Control Law

None of the components are listed.

Poisonous and Deleterious Substances

Deleterious

None of the components are listed.

Poisonous

None of the components are listed.

Specified poisonous

None of the components are listed.

JSOH Carcinogen : Not listed **High Pressure Gas Control** : Not available.

Law

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15. Regulatory information

Organic solvents poisoning: Not available.

prevention

Law Concerning Prevention: Not available.

of Pollution of the Ocean and Maritime Disaster

Pollutant Release and Transfer Registers (PRTR)

None of the components are listed.

Road law List of Specially Controlled

: Not listed

: Not available.

Industrial Waste

Japan inventory

: Not determined.

Safety, health and environmental regulations specific for the product

: No known specific national and/or regional regulations applicable to this product

(including its ingredients).

16. Other information

History

7/28/2014. **Date of printing** Date of issue/Date of 7/18/2014.

revision

Date of previous issue 7/16/2014. **Version** : 0.05

References : Not available.

▼ Indicates information that has changed from previously issued version.

: 7/18/2014.

Notice to reader

Date of issue/Date of revision

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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