SAFETY DATA SHEET

Tech Rub-O-Matic, Aerosol

1. Product and company identification

Product name : Tech Rub-O-Matic, Aerosol

Product code : 704A

Product type : Aerosol.

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

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

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 toxicity: 15%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 75%

GHS label elements

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.

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

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Symbol :

Other hazards which do not result in classification : Causes digestive tract burns.

3. Composition/information on ingredients

Substance/mixture : 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.
Propane	5 - 10	74-98-6	(2)-3	Not available.
2-methylpropane	0 - 5	75-28-5	(2)-4	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

First aid measures

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.

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.

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.

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

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.

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

4. First aid measures

See Section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

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. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special precautions 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 : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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. 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. 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 non-combustible, 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 : 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 away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Separate from oxidizing materials. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
2-methylpropane	日本産業衛生学会 (Japan, 5/2011). OEL-M: 500 ppm 8 hours. OEL-M: 1200 mg/m³ 8 hours.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

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.

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.

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.

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.

Eye 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.

8. Exposure controls/personal protection

Skin 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.

9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Colorless.

Odor : Solvent. [Strong]

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : Not available.

Flash point : Closed cup: -9°C (15.8°F)

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 0.724

Solubility : Not available.

Partition coefficient: n-octanol/water : Not available.

Decomposition temperature : Not available.

SADT : Not available.

Auto-ignition temperature : Not available.

Viscosity : Not available.

Aerosol product

Type of aerosol : Spray

Heat of combustion : -5.721 kJ/g

Ignition distance : Not available.

Enclosed space ignition - Time equivalent : Not available.

Enclosed space ignition - Deflagration density : Not available.

Flame height : Not available.

Flame duration : Not available.

10. Stability and reactivity

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 : No specific data.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Most important health effects

Potential acute health effects

Inhalation : Harmful if inhaled. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

Ingestion : Corrosive to the digestive tract. Causes burns.

Skin contact : May be harmful in contact with skin.

Eye contact : No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Eye contact : 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.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Ingestion : Adverse symptoms may include the following:
stomach pains

Skin contact : No specific data.

Eye contact : Adverse symptoms may include the following:
irritation
redness

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
solvent naphtha (petroleum blend), light	LC50 Inhalation Gas.	Rat	3400 ppm	4 hours
	LD50 Dermal	Rat	>4000 mg/kg	-
	LD50 Oral	Rat	>8000 mg/kg	-
2-methylpropane	LC50 Inhalation Vapor	Rat	658000 mg/m³	4 hours

Chronic toxicity

Not available.

Irritation/Corrosion

11. Toxicological information

Not available.

Sensitizer

Not available.

Carcinogenicity

Not available.

Mutagenicity

Not available.

Teratogenicity

Not available.

Reproductive toxicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Propane 2-methylpropane	Category 3 Category 2	Not applicable. Not determined	Narcotic effects heart

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
solvent naphtha (petroleum blend), light	ASPIRATION HAZARD - Category 1

ATE value

Route	Result
Dermal Inhalation (gases)	3541.7 mg/kg 4585.7 ppm

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Not available.

Persistence/degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Propane 2-methylpropane	2.36 2.8	- -	low low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility : Not available.

Other adverse effects : No known significant effects or critical hazards.

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 non-recyclable 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. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
IMDG Class	1950	Aerosols	2.1	-		-
IATA Class	1950	Aerosols	2.1	-		-

PG* : Packing group

15. Regulatory information

Japan Control Law

Explosives Control Law : Not applicable.

High Pressure Gas Control Law : Not available.

Fire Service Law : Class 4: Type 1 petroleum

Designated quantity : Not available.

Fire Service Law : Not available.

Designated quantity : Not available.

Substance to report : Not applicable.

Designated quantity : Not available.

Fire Service Law - Obstructive materials : Not listed

Characteristics : Not available.

Danger class : Not available.

Poisonous and Deleterious Substances

Use of specified chemical substances : Not available.

ISHL : Flammable liquid Class 2

Organic solvents poisoning prevention : Not available.

Lead regulation : Not applicable.

Occupational diseases : Not available.

15. Regulatory information

Law Concerning Prevention of Pollution of the Ocean and Maritime Disaster : Not available.

Notification Regulating Transportation of Dangerous Materials by Sea : Not available.

Not applicable.

Civil Aeronautics Law : Not available.

Pollutant Release and Transfer Registers (PRTR) : Not listed

Road law : Not available.

JSOH Carcinogen : Not listed

ISHL Prevention of Tetraalkyl Lead Poisoning : Not listed

ISHL Harmful Substances Subject to Obtaining Permission for Manufacturing : Not listed

ISHL Harmful Substances, Prohibited for Manufacturing : Not listed

ISHL Chemicals requiring notification : Not listed

ISHL Dangerous Substances : Combustible gas

List of Specially Controlled Industrial Waste : Not listed

Chemical Substances Control Law (CSCL)

Not available.

Biodegradability : Not available.

Concentration of chemicals accumulated in fish : Not available.

Japan inventory : Not determined.

Other regulations : Not available.

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

Date of printing : **12/15/2014.**

Date of issue/Date of revision : 12/15/2014.

Date of previous issue : No previous validation.

Version : 0.01

References : Not available.

16. Other information

Indicates information that has changed from previously issued version.

Notice to reader

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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.