

# Safety Data Sheet

## SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name :</b> TITRANT 20 (T-20)	
<b>Manufacturer's Name:</b> Nihon Parkerizing (M) Sdn. Bhd.	<b>Emergency Telephone No.:</b> 03-33410227,33410085,33410091
<b>Address:</b> No. 10, Jalan Keluli 2, Kawasan Perindustrian Bukit Raja, 41050 Klang, Selangor.	<b>Email:</b> <a href="mailto:razi@nihonparker.com">razi@nihonparker.com</a> <a href="mailto:norzila@nihonparker.com">norzila@nihonparker.com</a>
<b>Description:</b>	<b>Revised Date:</b> 05 May 2024

## SECTION 2 : HAZARD IDENTIFICATION

### GHS Classification

#### Physical hazards:

Explosives	: Not applicable
Flammable gases	: Not applicable
Flammable aerosols	: Not applicable
Oxidizing gases	: Not applicable
Gases under pressure	: Not applicable
Flammable liquids	: Classification not possible
Flammable solids	: Not applicable
Self-reactive substances and mixtures	: Not applicable
Pyrophoric liquids	: Not classified
Pyrophoric solids	: Not applicable
Self-heating substances and mixture	: Not classified
Substances and mixtures, which in contact with water emit flammable gasses	: Not applicable
Oxidizing liquids	: Classification not possible
Oxidizing solids	: Not applicable
Organic peroxides	: Not applicable
Corrosive to metals	: Classification not possible

#### Hazardous property for the health :

Acute toxicity – Oral	: Not classified
Acute toxicity – Dermal	: Not classified
Acute toxicity – Inhalation (Gases)	: Not applicable
Acute toxicity – Inhalation (Vapors)	: Not classified
Acute toxicity – Inhalation (Dusts, Mists)	: Not classified
Skin Corrosion / Irritation	: Category 1
Serious Eye Damage / Eye Irritation	: Category 1

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Respiratory sensitization	: Classification not possible
Skin sensitization	: Classification not possible
Germ Cell Mutagenicity	: Classification not possible
Carcinogenicity	: Classification not possible
Reproductive toxicity	: Classification not possible
Specific target organ toxicity following (single exposure)	: Classification not possible
Specific target organ toxicity following (repeated exposure)	: Classification not possible
Aspiration hazard	: Classification not possible

**Environmental hazards:**

Hazardous to the aquatic environment acute hazard	: Not classified
Hazardous to the aquatic environment chronic hazard	: Classification not possible

**GHS label elements:****Pictogram****Signal word** : Danger**Hazard Statements:**

H314 Cause severe skin burns and eye damage

**Precautionary Statements****Prevention:**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash hands, face thoroughly after handling.

**Response:**

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse.

Immediately call a POISON CENTRE or doctor/physician

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/container through a licensed disposal agent in accordance with local/regional/national/international regulations (to be specified).

**SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS**

Division of chemical substance/mixture : Mixture

Chemical name or generic name : **TITRANT 20 (T-20)**

Ingredient(s)	CAS Number	Content (%)
Sulfuric acid	7764-93-9	0.1 - 1
Water	7732-18-5	-

**SECTION 4 : FIRST AID MEASURES**

**Description of first aid measures:**

<b>INHALATION</b>	<ul style="list-style-type: none"> <li>- Remove victim to fresh air and keep at rest position comfortable for breathing.</li> <li>- May irritate throat.</li> <li>- Call a POISON CENTER or doctor/physician.</li> </ul>
<b>SKIN</b>	<ul style="list-style-type: none"> <li>- Wash the victim's skin with running water or shower.</li> <li>- Immediately call a POISON CENTER or doctor/physician.</li> <li>- Remove/take off immediately all contaminated clothing.</li> <li>- Wash contaminated clothing before reuse</li> </ul>
<b>EYES</b>	<ul style="list-style-type: none"> <li>- Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing</li> <li>- Call a POISON CENTER or doctor/physician. Get medical advice/attention immediately.</li> </ul>
<b>SWALLOWED</b>	<ul style="list-style-type: none"> <li>- Corrosive, do not induce vomiting.</li> <li>- Rinse mouth</li> <li>- If you feel unwell: Call a POISON CENTER or doctor/physician. Get medical advice/attention immediately.</li> <li>- If the victim is vomiting, turn the head to the side so that the airways are not blocked.</li> </ul>
<b>PROTECTION FOR FIRST-AIDERS</b>	<ul style="list-style-type: none"> <li>- Personal protective equipment described in Section 8: Exposure control/Personal protection.</li> <li>- Ventilated area, if gases, vapors, mists or dusts occur.</li> </ul>

**SECTION 5 : FIRE FIGHTING MEASURES****Suitable Extinguishing Media:**

- This product is not combustible.

**Specific Extinguishing Method:**

- Remove combustible materials from fire area.
- Move container from fire areas if possible to do so without hazard.
- Cool down container and the surrounding area by water, if container can't be moved.

**Protection For Fire-Fighters:**

- Fight a fire from windward to avoid inhalation of vapor and combustion gases.
- In firefighting, wear proper protective equipment (fire fighter protective clothing, respiratory protection) to avoid inhale and contact with the chemical.

**SECTION 6 : ACCIDENTAL RELEASE MEASURES****Personal Precautions, Protective Equipment and Emergency Procedures:**

- Wear protective equipment regulated in Section 8: Exposure Control and Personal Protection to avoid contact to eyes or skin and inhalant gases, dust and fumes.
- Set up off-limits area to prevent secondary disaster.
- Use local exhaust to avoid inhalant gases, mist, vapor or dust for indoor work.

**Environmental Precautions:**

- Take caution to avoid possible environmental impact at spill or disposal to natural water system.
- In case of using waste water treatment equipment, call the administrator to avoid discharge the waste water involving the product.

**Methods and Materials for Containment and Cleaning Up:**

- Retrieve spilled material, using shovel or waste cotton.
- Dike to contain spill in case of large spill.
- Retrieve spilled material, collect and store in suitable.
- Spilled materials and contaminated substances should be disposed as regulated.

**Secondary Disaster Prevention Measures:**

- Set-up off-limits area to prevent secondary disaster.
- Call the section relating safety, hygiene, environment, disaster prevention etc.
- Take proper measures.

**Recovery, Neutralization and Disposal:**

- Acidic substance. Use soda ash, slaked lime to neutralize
- Work carefully, in neutralization or dilution, heat may generate.
- In case of small spill, retrieve spilled material using absorbent such as sawdust,

soil, sand waste cotton

- Dike to contain spill in case of large spill. After collect in suitable area, dispose as regulated.

## SECTION 7 : HANDLING AND STORAGE

### Technical Measures:

- Use corrosion resistant material for equipment.
- Take necessary steps to avoid contact and/or overexposure, for instant protective facilities, protective equipment regulated in Section 8: Exposure Control and Personal Protection.
- Handle in a well-ventilated place.

### Local Ventilation/Total Ventilation:

- Take necessary ventilation regulated in Section 8: Exposure Control and Personal Protection.

### Precautionary Statements:

- Wear suitable Protective Equipment, gloves and eye/face protection to avoid contact with skin, clothing or mucous membrane.
- Wash hand and faces after handling. Do not bring polluted protective equipment into the resting room.
- Wear suitable protective equipment and handle in a well-ventilated place.

### Safe Handling Instructions:

- Acidic substance. Avoid contact to alkaline substance.
- Avoid rough handling such as toppling, dropping, exposing shock, dragging.
- Take a measure to call attention to workers about hazard information by posting SDS.

### Avoid Contact Storage:

- Refer to compatible materials shown in Section 10 : Stability and Reactivity

### Suitable Condition:

- Store locked-up.
- In every use, keep container tightly closed.

### Packing Material:

- Use product containers or a container having enough strength.

### Incompatible material:

- Alkaline substances.

## SECTION 8 : EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Protective equipment:

- Make available hand wash and face wash in work place. After handling, wash hands and face.
- Use local exhaust, push-pull ventilation system or general ventilation to keep

below specified level.

**Occupational Exposure Limit (ACGIH):**

Ingredients	TWA	STEL	Ceiling
Sulfuric acid	0.2 mg/m <sup>3</sup>	-	-

**Occupational Exposure Limit (ACGIH)**

Ingredients	PEL	Ceiling
Sulfuric acid	1 mg/m <sup>3</sup>	-

**Personal Protective Equipment**
**Respiratory Protection:**

- If necessary, wear proper respiratory protection.

**Hand Protection:**

- Wear chemical resistant gloves.

**Eye Protection:**

- Use proper eye protection
- If necessary, use chemical goggles or face shield.

**Skin and Body Protection:**

- Wear proper protective clothing such as to avoid direct skin contact.
- Wear chemical resistant protective clothing.

**Appropriate Hygiene Measures:**

- Do not breathe dust, fume, mist, vapors, and spray – if inhalable particles may occur during use.
- Wash hands, face thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**
**Appearance**

Physical State : Liquid

Color : Colorless

**Odor** : No Information

**pH** : 1.0

**Melting Point/Freezing Point** : No Information

**Initial Boiling Point and Boiling Range:** No Information

**Flash Point** : No Information

**Auto-Ignition Temperature** : No Information

**Upper/Lower Flammability**
**or Explosive Limits** : No Information

**Vapor Pressure** : No Information

**Vapor Density** : No Information

**Evaporation Speed** : No Information

**Specific Gravity(relative density)** : 1.0 (27°C)

**Solubility in Water** : No Information

**Dissolubility in Water** : Water soluble liquid

**Solubility in Organic Solvent** : No Information

**Dissolubility in Organic Solvent** : No Information

**n-Octanol/Water Partition Coefficient** : No Information

**Decomposition Temperature** : No Information

**SECTION 10 : STABILITY & REACTIVITY**
**Stability/Possibility of Hazardous Reaction:**

Stable under normal conditions.

**Condition to Avoid:**

No Information.

**Incompatibility Materials:**

No information

**Hazardous decomposition product:**

No Information

**Others:**

No Information

**SECTION 11 : TOXICOLOGICAL INFORMATION**

Acute toxicity studies are shown below:

**Acute toxicity**

Sulfuric acid	LD50(oral)	Rat	2140 mg/kg
Sulfuric acid	LC50(gas)	Rat	1020 mg/L
Sulfuric acid	LC50(dust, mist)	Rat	0.375 mg/L (4h)
Sulfuric acid	LC50(dust, mist)	Rat	0.347 mg/L (4h)

**Health hazard category list 1:**

Ingredients	Skin corrosion / irritation	Serious eye damage/ eye irritation	Respiratory sensitization	Skin sensitization	Germ cell mutagenicity	Reproductive toxicity
Sulfuric acid	1	1	X	-	X	-
Water	X	X	X	X	X	X



**SECTION 14 : TRANSPORT INFORMATION**

- Make sure no leak in the container. Load steadily to avoid load shifting such as falling, dropping and damaged.
- Follow the procedure specified in section 7 – Handling and Storage.
- Regulatory information with regard to the transportation of this substances is describe as below:
  - ❖ UN Recommendation of Transportation of Dangerous Good
    - UN number : 3264
    - Class : 8
    - Packing Group : III
  - ❖ Land Transportation : Follow all regulations in the country or region.
  - ❖ Marine Transportation : Follow the procedure specified by IMDG CODE. Do not discharge into the sea area.
  - ❖ Air Transport : Follow the procedure specified by IATA REGULATION.

**SECTION 15 : REGULATORY INFORMATION**

- Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

**SECTION 16 : ADDITIONAL INFORMATION****Other Precautions:**

For industrial use only.

**USERS RESPONSIBILITY:**

This product safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations. Please consult your local sales representative for any further information.

**SECRECY OBLIGATION:**

This document contains trade secrets, know-how, and other intellectual properties of the manufacturer. The purposes of this document are primarily to disclose information for occupational safety and health, to respond to requirement from relevant laws, ordinances, regulations and requirements from public authorities. Illegal use of any part of this document may from breach manufacture's intellectual properties and subject to compensation for damages.