Revised date : 01. 05. 2011

SAFETY DATA SHEETS

1. IDENTIFICATION

Product identifier: MECHA SLUDGE CLEANER (Aerosol)

Company product code: A-0025

Supplier's name: Nippon Mecha-Chemical Co., Ltd.

Address: 3-2-23, Honohara, Toyokawa-Shi, Aichi-Pref., 442-0061, Japan

Phone number: (81)-533-84-3245

Emergency phone number: (81)-533-84-3245

Fax number: (81)-533-84-3429

Specific use: Rust/Sludge remover for wire guide of wire EDM

2. HAZARD IDENTIFICATION

GHS classification

Health hazards

Physical hazards Explosives Not classified

Flammable gases Category 1 Flammable aerosols Category 2 Oxidizing gases Not classified Gases under pressure Liquefied gas Flammable liquids Not classified Not classified Flammable solids Self-reactive substances and mixtures Not classified Not classified Pyrophoric liquids Pyrophoric solids Not classified Not classified Self-heating substances and mixtures Not classified Substances and mixtures which,

contact with water, emit flammable gases

Oxidizing liquids
Oxidizing solids
Organic peroxides
Corrosive to metals
Acute toxicity (oral)
Not classified
Not classified
Not classified

Acute toxicity (orar)

Acute toxicity (dermal)

Acute toxicity (gases)

Acute toxicity (vapours)

Acute toxicity (dust/mist)

Not classified

Not classified

Not classified

Skin corrosion / irritation

Serious eye damage / eye irritation

Respiratory sensitization

Skin sensitization

Classification not possible

Specific target organ systemic toxicity Category 3 (narcotic)

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single exposure

Specific target organ systemic toxicity Classification not possible

repeated exposure

Aspiration hazard Not classified

Environmental Acute aquatic toxicity Classification not possible hazards Chronic aquatic toxicity Classification not possible

Labelling elements : Flame / Exclamation mark





Signal words : Danger

Hazard statements : Extremely flammable gas

Flammable aerosol

Contains gas under pressure; may explode if heated

May cause drowsiness or dizziness.

Precautionary statements : Do NOT inhale or ingest.

Avoid direct sunlight and high temperature (> 40°C) as

the container may explode.
Use with adequate ventilation

Flammable, do not use around the fire.

Keep out of reach of children.

If accidentally swallowed, seek medical attention

immediately.

If any dizziness occurs during usage, stop usage immediately and rest in a well ventilated area. Seek

medical attention if necessary.

Ensure to seal container during storage. Avoid high temperature (> $40^\circ\!\text{C}$) and moisture as the container may

explode or generate rust.

Quality and performance are ensured for one year from

the product manufacture date.

When there is unusable product left in the can, spray the remaining gas out completely at a well-ventilated open space. Then dispose as non-combustible waste.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance or Mixture : Mixture

<u>Component</u>	Chemical name	$\underline{\mathrm{Wt}\%}$	CAS Registry#
A	Butane	5	106-97-8
В	Propane	3	74-98-6
\mathbf{C}	1-Methoxy-2-propanol	2	107-98-2

GHS hazardous ingredients : Components A, B and C

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4. FIRST AID MEASURES

Inhalation : Rest in a well ventilated area. Keep the person warm by using blanket.

Seek medical attention if necessary.

Skin contact : Rinse with running water immediately. Seek medical attention if

necessary.

Eye contact : Rinse with clean running water for at least 15 minutes and seek

medical attention.

Ingestion : Have a glass of water immediately and induce vomiting.

When cannot vomit or illness remains, give large amount of water or

milk, and seek medical attention immediately.

5. FIRE FIGHTING MEASURES

Extinguishing media : Foam, Carbon dioxide, Dry chemical, Water

Fire fighting instructions : 1. Move combustible substances away from the fire.

2. Use dry chemical or carbon dioxide for initial

quenching.

3. Keep sealed containers wet and cold by using water.

4. In the case of peripheral fire, the liquid inside the aerosol can vaporised to increase the pressure of aerosol can and it may explode. Remove aerosol products away from the fire immediately. If the removal of aerosol can was difficult, secure enough distance for quenching.

5. Forbid unauthorised entry.

Protective equipment : Quenching should start from the windward and ensure to

wear personal protective equipments.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Avoid contact with eyes, skin and clothes.

Environmental precautions : Must NOT drain directly.

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Methods and materials for

containment and cleaning

up

Collect the leaked agent in empty container as much as possible by using rags and wash left over away with water.

Be aware of possible environmental attack by the leakage.

Wear appropriate protective equipments.

Secure appropriate ventilation.

7. HANDLING AND STORAGE

Handling : Handle the container carefully to avoid fall and damage.

Be aware of generating static electricity and spark.

Avoid contact/heating with fire, spark and high temperature objects.

Avoid contact with eyes, skin and inhale vapours. Wear appropriate personal protective equipment.

Prevent mixture with incompatible substances (Oxidising agent).

Storage: Electrical apparatus used in store room should be explosion-proof and

have an earth.

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Avoid heat, spark, fire and static electricity accumulation.

Never store with Oxidising agent at same area.

Store in a cool ventilated area and avoid direct sunlight.

Store away from ignition source and heating source.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit values [Butane] : ACGIH (1999) TLV-TWA 1,900 mg/m³

[Propane] ACGIH TLV-TWA 2,500 mg/m³

[1-Methoxy-2-propanol] ACGIH (1999) TLV-TWA 606mg/m³ (skin)

Engineering controls : Use with adequate ventilation.

Handle and store in a cool ventilated space.

Personal protective equipment

Respiratory protection : Mask

Hand protection : Rubber gloves
Eye protection : Safety glasses

Skin protection : Long sleeves work wear

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Colourless clear liquid

Odour : Apple odour

pH : 6.0

Melting point / freezing point Not available Initial boiling point and boiling range Not applicable Flash point Not applicable Upper / lower flammability or explosive limits Not applicable Vapour pressure Not applicable Vapour density Not applicable 1.04 g/cm² (15°C) Relative density Solubility Water soluble

Partition coefficient: n-octanol / water : Not applicable
Auto-ignition temperature : Not applicable
Decomposition temperature : Not available
Viscosity : 1.9 mPa·s (15°C)

10. STABILITY AND REACTIVITY

Chemical stability : Stable

Possibility of hazardous reactions : React vigorously with oxidising agent

Conditions to avoid : Heating

Incompatible materials : Oxidising agent Hazardous decomposition products : Not applicable

11. TOXICOLOGICAL INFORMATION

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Acute toxicity [Butane] : LC₅₀ (4 hours) 277,374 ppm (rat/inhalation)

[Propane] LC₅₀ (4 hours) 38,890 ppm (guinea pig/inhalation)

[1-Methoxy-2-propanol] LD₅₀ $5,400 \mu l/kg (rat / ingestion)$

LD₅₀ 10 ml/kg (rat / skin exposure)

Skin corrosion / irritation : [Butane] Classification not possible

[Propane] Not classified

Serious eye damage / eye irritation : [Butane] Classification not possible

[Propane] Classification not possible

Respiratory or skin sensitization : [Butane] Classification not possible

[Propane] Classification not possible

Germ cell mutagenicity : [Butane] Classification not possible

[Propane] Classification not possible

Carcinogenicity : [Butane] Classification not possible

[Propane] Classification not possible

Reproductive toxicity : [Butane] Classification not possible

[Propane] Classification not possible

Specific target organ systemic

toxicity single exposure

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[Propane] Category 3 (narcotic)

: [Butane] Category 3 (narcotic)

Specific target organ systemic

toxicity repeated exposure

: [Butane] Classification not possible

[Propane] Classification not possible

Aspiration hazard : [Butane] Not classified

[Propane] Not classified

12. ECOLOGICAL INFORMATION

Toxicity : Information is not available
Persistence and degradability : Information is not available
Bioaccumulative potential : Information is not available
Mobility in soil : Information is not available
Other adverse effects : Information is not available

13. DISPOSAL CONSIDERATIONS

Flammable. Do NOT throw into fire after usage.

Aerosol should be completely empty before disposing.

When there is no usable product left in the can, spray the remaining gas out completely at a well-ventilated open space. Then dispose as non-combustible waste.

Comply with all federal, state and local regulations.

14. TRANSPORT INFORMATION

Transport : Confirm no leak in vessel.

Carefully load cargo to avoid falling and damage.

UN number : 1950 UN hazard class 2.1

UN subsidiary risks Information is not relevant
UN packing group Information is not relevant

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15. REGULATORY INFOMATION

The compounds in the product are not under the Montreal Protocol, the Stockholm Convention and the Rotterdam Convention.

16. OTHER INFORMATION

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