

MATERIAL SAFETY DATA SHEET

MIYAGAWA 246-R

No. C0003

PRODUCT

SECTION I CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : MIYAGAWA 246-R
PRODUCT TYPE : Cutting oil
MANUFACTURER'S NAME : Nippon Grease Co., Ltd.
ADDRESS : 4-11-28, Minami-Senba, Chuo-ku, OSAKA, 542-0081 Japan
TELEPHONE NUMBER : 06-6282-5412
EMERGENCY TELEPHONE NUMBER: 078-731-8147
DATE PREPARED : August 16, 2012

SECTION II COMPOSITION/INFOMATION ON INGREDIENTS

MIXTURE: Base oil and Additive

INGREDIENTS AND COMPONENTS (% by mass):

Highly refined petroleum oil	approx. 85
Sulfur type EP agent	5~10
Oiliness agent	5~10

UN CLASS AND UN NUMBER: Not Applicable

SECTION III HAZARDS IDENTIFICATION

CLASS NAME OF HAZARDOUS CHEMICALS FOR SDS IN JAPAN: Not Applicable

SECTION IV FIRST-AID MEASURES

EYE CONTACT : Gently rinse the affected eyes with clean water for at least 15 minutes and consult an ophthalmologist.

SKIN : Wash the affected area under running water using a mild soap.

INHALATION : Remove the victim from the contamination immediately to fresh air.
Call a physician if symptom persists.

INGESTION : Do not induce vomiting. Call a physician.

SECTION V FIRE-FIGHTING MEASURES

EXTINGUISH MEDIA: Dry chemical, Foam, Carbon Dioxide

FIRE FIGHTING PROCEDURE : Fire-fighters should wear self-contained breathing apparatus with full-face piece operated in positive pressure mode.

SECTION VI ACCIDENTAL RELEASE MEASURES

Shut off all sources of ignition. Absorb spill with inert materials (e.g., dry sand or earth), then place in a chemical waste container with covers for disposal, using non-sparking tools.

SECTION VII HANDLING AND STORAGE

HANDLING: Avoid direct contact with skin or eyes.
Use in the well-ventilated areas.

STORAGE : Should be kept tightly sealed and stored in doors out of direct sunlight.
Keep away from sources of heat, open flames and sparks.
Avoid long storage periods since the product degrades with age.

SECTION VIII EXPOSURE CONTROL / PERSONAL PROTECTION

EXPOSURE: The limit for mineral oil is TWA 5mg/m³ as oil mist by ACGIH.

ENGINEERING MEASURES: Do not use in areas without adequate ventilation.

EYE PROTECTION: Wear protective eyeglasses or chemical safety goggles if oil mist generated.

HAND,SKIN,AND
BODY PROTECTION : When prolonged or frequently repeated contact could occur, use protective clothing such as butyl rubber, impervious to this material.

SECTION IX PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR : Brown color , transparent liquid , mild odor
DENSITY (g/cm³) at 15°C: 0.88
SOLUBILITY IN WATER : Negligible
MELTING POINT °C : NA(Liquid)
DROPPING POINT °C : NA(Liquid)
BOILING POINT °C : NA(Very High)

SECTION X PHYSICAL HAZARD (STABILITY AND REACTIVITY)

STORAGE STABILITY: This product is stable under normal storage.
INCOMPATIBILITY: Strong oxidizing agents.
DECOMPOSITION PRODUCTS: Carbon oxides, sulfur oxides, etc.
POLYMERIZATION: Will not occur.
FLASH POINT (METHOD USED) °C: 174 (coc)

SECTION XI TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Inhalation No data as product
Oral No data as product
CORROSIVE AND IRRITANT PROPERTIES: If prolonged or repeated skin contact occurs, may cause skin irritation.
If eye contact occurs, may cause eye irritation.

SECTION XII ECOLOGICAL INFORMATION

No known ecological data.

SECTION XIII DISPOSAL CONSIDERATION

Waste must be disposed of in accordance with federal, state and local environment control regulations.

SECTION XIV TRANSPORT INFORMATION

Keep away from oxidizing materials and source of ignition.
Japan Fire Protection Law: Dangerous substance Class4-petroleum grade No.3
UN Recommendations on the Transport of Dangerous Goods: Non dangerous substance

Follow all regulations in your country.

SECTION XV REGULATORY INFORMATION

Follow all regulations in your country.

SECTION XVI OTHER INFORMATION

REFERENCES:

- 1) IARC MONOGRAPHS ON THE EVALUATION OF THE CARCINOGENIC RISK OF CHEMICALS TO HUMANS VOL.33
 - 2) Material Safety Data Sheet guidebook (English) (Japan Chemical Industry Association Information Center)
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This Material Safety Data Sheet was prepared on the basis of materials' information, and data obtained at present by our company. To the best of our knowledge, the information contained here in is accurate.

Final determination of suitability of all material is the sole responsibility of the user.

All materials may present unknown hazards and should be used in caution.

The information herein is given in good faith, but no warranty, express or implied, is made.