SAFETY DATA SHEET

1. Identification

Product Name	**Moty's M114 15W60**
Chemical Family / Description	Mixture substances
Intended Use	Gasoline Engine Oil
Campany	TRIBO JAPAN Co., Ltd.
Address	2-25-4 Higashi-nippori Aarakawa-ku Tokyo 116-0014 Japan
Telephone	+81-3-3806-8277
Fax	+81-3-3805-5362

2. Hazards Identification

Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008 [CLP/GHS]

- Not classified.

Classification According to Directive 67/548/EEC [DSD]

- Not classified.

Label Elements

Labelling to Regulation (EC) No. 1272/2008

- Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Signal Word • No signal word.

Hazard Statement • No known significant effects or critical hazards.

Precautionary Statements

Prevention • Not available.

Response • Not available.

Storage • Not available.

Disposal • Not available.

Hazardous Ingredients

- Not available.

Supplemental Label Elements

- Not available.

Other Hazards • Not available.

3. Composition / Information on Ingredients

Substances

Ingredient Name	CAS No.	mass%
1-Decene, homopolymer, hydrogenated	68037-01-4	> 65
TMP (Trimethylolpropane) caprylate/ Caprate	11138-60-6	> 15
Proprietary Engine Oil Additive	Not required	< 20

- There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

4. First Aid Measures

Description of First Aid Measures

Inhalation

- Inhalation at ambient temperature is unlikely because of the low vapour pressure of the substance.
- In case of symptoms arising from inhalation of fumes, mists or vapour, remove casualty to a quiet and well ventilated place if safe to do so.
- **If the casualty is unconscious and:**
- **Not breathing:** ensure that there is no obstruction to breathing and give artificial respiration by trained personnel. If necessary, give external cardiac massage and obtain medical assistance.
- **Breathing:** place in recovery position. Administer oxygen if necessary. Obtain medical assistance if breathing remains difficult.

Skin Contact

- Remove contaminated clothing and footwear, and dispose of safely. Wash affected area with soap and water.
- Seek medical attention if skin irritation, swelling or redness develops and persists.
- When using high-pressure equipment, injection of product can occur. If high-pressure injuries occur, immediately seek professional medical attention. Do not wait for symptoms to develop.
- **For minor thermal burns:** cool the burn. Hold the burned area under cold running water for at least five minutes, or until the pain subsides. However, body hypothermia must be avoided.
- Do not put ice on the burn. Remove non-sticking garments carefully.
- DO NOT attempt to remove portions of clothing glued to burnt skin but cut round them.
- Seek medical attention in all cases of serious burns.

Eye Contact

- May cause burn in case of contact with product at high temperature.
- Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
- If irritation, blurred vision or swelling occurs and persists, obtain medical attention.
- If hot product is splashed into the eye, it should be cooled immediately to dissipate heat, under cold running water. Immediately seek specialist medical assessment and treatment for the casualty.

Ingestion

- Always assume that aspiration has occurred. Seek professional medical attention or send the casualty to a hospital. Do not wait for symptoms to develop.
- Product is as an aspiration hazard, and swallowing may lead to lung damage. Even small amounts of product aspirated into the lung require medical evaluation and treatment.
- Do not induce vomiting. Do not give anything to drink.

Protection of First-Aiders

- No action shall be taken involving any personal risk or without suitable training.

Most Important Symptoms and Effects, both Acute and Delayed

Inhalation

- Irritation of the respiratory tract due to excess fumes, mists or vapour exposure.

Skin

- Dry skin or irritation may arise in case of repeated or prolonged exposure. May cause burns in case of contact with product at high temperature.

Eye

- Slight irritation (unspecific).

Ingestion

- For acute toxicity, few or no symptoms expected, e.g. nausea and diarrhoea. However, product is an aspiration hazard.
- Aspiration of low viscosity liquids into the lungs is a serious, potentially fatal, event.
- Aspiration may be recognized from the history of events, a smell of hydrocarbons on the breath, signs of vomiting or symptoms such as choking or coughing.

Indication of any Immediate Medical Attention and Special Treatment Needed

Notes to Physician

- Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific Treatments

- No specific treatment.

5. Fire Fighting Measures

Extinguishing Media

Suitable

- Foam (specifically trained personnel only).
- Water fog (specifically trained personnel only).
- Dry chemical powder.
- Carbon dioxide. Sand or earth.
- Other inert gases (subject to regulations).

Unsuitable

- Do not use direct water jets on the burning product as they could cause splattering and spread the fire.
- Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Special Hazards Arising from the Substance or Mixture

Hazards from the Substance or Mixture

- In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous Thermal Decomposition Products

- **Decomposition products may include the following materials:** carbon dioxide, carbon monoxide

Advice for Firefighters

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.

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.

- Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Additional Information

- Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts and oxidizing materials.
- This material is not explosive as defined by established regulatory criteria.
- May be combustible at high temperature.

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 spilt material. Put on appropriate personal protective equipment.

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".

Envioronmental Precautions

- Avoid dispersal of spilt 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 Material 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 licensed waste disposal contractor.

Large Spill

- Stop leak if without risk. Move containers from spill area. 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.
- Dispose of via a licensed waste disposal contractor.

Reference to Other Sections

- For recommended personal protective equipment, see Section 8
- For disposal considerations, see Section 13.

7. Handling and Storage

Precautions for Safe Handling

- Ensure that all relevant regulations regarding handling and storage facilities of combustible products are followed.
- It is recommended to keep away from sparks/open flames/hot surfaces. – No smoking. Take precautionary measures against static electricity.
- Avoid splash filling of bulk volumes when handling hot liquid product.
- Use and store only outdoors or in a well-ventilated area.
- Avoid contact with skin. Avoid breathing fume/mist.
- Use personal protective equipment as required.
- Prevent the risk of slipping.
- Avoid release to the environment.

Conditions for Safe Storage, Including any Incompatibilities

- Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation.
- Storage installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills.
- Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidizing agents.
- Recommended materials: for containers, or container linings use mild steel, or stainless steel.
- **Unsuitable materials:** some synthetic materials may be unsuitable for containers or container linings, depending on the material specification and intended use.
- Compatibility should be checked with the manufacturer.

If the product is supplied in containers:

- Keep only in the original container or in a suitable container for this kind of product.
- Keep containers tightly closed and properly labelled.
- Empty containers may contain combustible product residues.
- Do not weld, solder, drill, cut or perform similar operations unless they have been properly cleaned.

Hygiene Measures:

- Ensure that proper housekeeping measures are in place.
- Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets.
- Keep away from food and beverages.
- Do not eat, drink or smoke when using this product.
- Wash hands thoroughly after handling.
- Change contaminated clothes at the end of working shift.

Load / Unload Temperature, ℃

- Ambient

Storage Temperature, ℃

- Ambient

Specific end Use(s)

- Not available.

8. Exposure Controls and Personal Protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Control Parameters

EU Limit Values
- None.

UK Limit Values
- None.

Recommended Monitoring Procedure
- Not applicable.

Other: Human Health (DNELs, DMELs)
- Not available.

Other: Environmental (PNEC)
- Not available.

Exposure Controls

Appropriate Engineering Controls
- Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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.
- **Recommended:** Nitrile gloves.
- The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures).

- Most gloves provide only a short time of protection before they must be discarded and replaced.
- Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application.
- Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

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.

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.

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.

9. Physical and Chemical Properties

Appearance	Brown and Clear Liquid
Color	Light Brown
Odour	Characteristic, Mineral Oil
Odour Threshold	Not established
Melting/ Freezing Point (℃)	-40.0 (Pour Point)
Initial Boiling Point/ Range (℃)	404
Flash Point (℃)	238
Evaporation Rate	Not established
Flammability (solid, gas)	Not applicable
Flamm. or Expl. Limits	Not established
Vapot Pressure @20℃ (kPa)	< 0.13
Vapot Density (Air=1)	> 5
Relative Density @15℃ (g/cm^3)	0.880
Solubilities	Water: Negligible
Partition coeff. (Kow)	Not available
Auto-ignition Temperature (℃)	400

Decomposition Temperature (℃)	Not established
Viscosity @40℃ (mm^2/s)	183
Explosive properties	Not available
Oxidising properties	Not available

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.
- Under normal conditions of storage and use, hazardous polymerisation will not occur.

Conditions to Avoid
- Keep away from heat and direct sunlight. Avoid inhalation of vapour, spray or mist.

Incompatible Materials
- Strong oxidising materials.

Hazerdous Decomposition Products
- Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological Information

Information on Toxicological Eeffects

Acute Toxicity
- Based on available data, the classification criteria are not met.
- LD_{50} (Oral) > 5,000 mg/kg
- LC_{50} (Inhalation Dusts and mists) > 5.2 mg/L

Irritation/ Corrosion
- Not available.

Sensitisation
- No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.

Carcinogenicity
- No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC) or the European

Reproductive Toxicity
- No known significant effects or critical hazards.

Teratogenicity
- No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

Specific Target Organ Toxicity (Single Exposure)
- Not available.

Specific Target Organ Toxicity (Repeated Exposure)
- Not available.

Aspiration Hazard
- Not available.

Information on the Likely Routes of Exposure

Potential Acute Health Effects

Eye Contact
- No known significant effects or critical hazards.

Inhalation
- No known significant effects or critical hazards.

Skin Contact
- No known significant effects or critical hazards.

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.

Delayed and Immediate Effects and also Chronic Effects from Short and Long Term Exposure

Short Term Exposure

Potential Immediate Effects

• Not available.

Potential Delayed Effects

• Not available.

Long Term Exposure

Potential Immediate Effects

• Not available.

Potential Delayed Effects

• Not available.

Potential Chronic Health Effects

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.

Other information • Not available.

12. Ecological Information

Toxicity

- Daphnia, 48h, EL_{50} > 1,000 mg/L. WAF
- Fish, 96h, LL_{50} > 1,000 mg/L.
- Aquatic plants, 72h, NOELR 1,000 mg/L. WAF
- Daphnia, 21 days, NOELR 125 mg/L. WAF
- Micro-organism, 28 days, NOEC 2 mg/L.

Persistence and Degradability

• Not available.

Bioaccumulative Potential

• Not available.

Mobility in Soil

Soil/ Water Partition Coefficient (K_{OC})

• Not available.

Mobility • This product is not likely to move rapidly with surface or groundwater flows because of its low water solubility. This product is not likely to volatilise rapidly into the air because of its low vapour pressure.

Results of PBT and vPvB Assessment

PBT • Not available.

vPvB • Not available.

Other Adverse Effects • No known significant effects or critical hazards.

13. Disposal Considerations

Waste Treatment Methods

Product

Methods of Disposal

- The generation of waste should be avoided or minimised 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.

Hazardous waste

- Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

Packaging

Methods of Disposal

- The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

- This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport Information

UN Number	Not classified as dangerous goods for transport.
UN Proper Shipping Name	Not applicable
Transport Hazard Class (es)	Not applicable
Packing Group	Not applicable
Environmental Hazards	Not classified as marine pollutant/environmentally hazardous.
Special Precautions for User	Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. Regulatory Information

Safety, Health and Environmental Regulations/ Iegislation Specific for the Substance or Mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of Substances Subject to Authorisation

- **Annex XIV** None of the components are listed.
- **Substances of Very High Concern** None of the components are listed.

- **Annex XVII - Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Mixtures and Articles**
  Not applicable.

Other EU Regulations

- **Europe Inventory** This material is listed or exempted.
- **Seveso II Directive** This product is not controlled under the Seveso II Directive.

International Regulations

International Lists

- **Australia inventory (AICS):** This material is listed or exempted.
- **China inventory (IECSC):** This material is listed or exempted.
- **Japan inventory:** This material is listed or exempted.
- **Korea inventory:** This material is listed or exempted.
- **Malaysia Inventory (EHS Register):** This material is listed or exempted.
- **New Zealand Inventory of Chemicals (NZIoC):** This material is listed or exempted.
- **Philippines inventory (PICCS):** This material is listed or exempted.
- **Taiwan inventory (CSNN):** This material is listed or exempted.
- **United States inventory (TSCA 8b):** This material is listed or exempted.
- **Europe inventory:** This material is listed or exempted.
- **Canada inventory:** This material is listed or exempted.

Chemical Safety Assessment Complete.

16. Other Information

Indicates information that has changed from previously issued version.

Abbreviations and Acronyms

ATE	Acute Toxicity Estimate
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL	Derived No Effect Level
DMEL	Derived Minimum Effect Level
EL	Effect Level
EUH Statement	CLP-Specific Hazard Statement
LC	Lethal Concentration
LD	Lethal Dose
NOAEL	Noobserved-Adverse-Effect Level
NOEL	No-Observed-Effect Level
OECD	Organisation for Economic Co-operation and Development
PNEC	Predicted No Effect Concentration
RRN	REACH Registration Number
PBT	Persistent, Bioaccumulative, and Toxic
vPvB	very Persistent, very Bioaccumulative

References

- Annex VI of Regulation 1272/2008 on Harmonised Classification and Labelling for Certain Hazardous Substances (CLP Regulation).
- Information on Registered Substances; Chemical Substance Search; European Chemicals Agency (ECHA), available at the ECHA website: http://echa.europa.eu.
- Supplier safety data sheet.

Basis of Classification

- The recommendations presented in this Safety Data Sheet were obtained from actual test data when available, comparison with similar products, component information from suppliers and from recognized codes of good practice.

Control No.

Date of Revised November 08, 2017

Disclaimer:

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