SAFETY DATA SHEET

New Clearvac SA-160M

1. Production and Company Identification

Product name	：New Clearvac SA-160M
Product code	：570000/570010/570020
Supplier's details	：SATO VAC Inc. 1036, Fujikubo, Miyoshi-machi, Iruma-gun Saitama, 354-0041, JAPAN Tel: +81-49-258-1116
Emergency telephone Number	：Sales/ Factory Tel: +81-49-258-1116　Fax:+81-49-258-1117 Osaka Sales Tel: +81-72-981-7241　Fax: +81-72-981-8831
Identified uses	：Vacuum Pump Oil
Use advised against	：Do not use other than above listed proposes.

2. Hazards Identification

GHS classification	：Not classified
Supplemental label elements	：Avoid contact with skin and clothing. Wash thoroughly after handling.
Other hazards which do not result in classification	：Prolonged or repeated contact may dry skin and cause irritation.

3. Composition/ Information on Ingredients

Substance/ mixture	：Substance
Ingredient name	：Distillates(petroleum), hydrotreated heavy paraffinic Highly refined base oil (IP 346 DMSO extraction <3%) 100%

4. First Aid Measures

Inhalation	：Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if

symptoms occur.

Skin contact ：Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Eye contact ：Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.

Ingestion ：Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/ effects, acute and delayed potential acute health effects

Skin contact ：Defatting to the skin.
May cause skin dryness and irritation.

Over-exposure sings/symptoms

Skin contact ：Adverse symptoms may include the following
Irritation, dryness, cracking

Protection of first-aiders ：No action shall be taken involving any personal risk or without suitable training.

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

5. Fire-Fighting Measures

Suitable extinguishing media ：Use dry chemical, CO_2, alcohol-resistant foam or water spray (fog).

Unsuitable extinguishing media ：Do not use water jet.

Specific hazards arising ： In a fire or if heated, a pressure increase will occur and the

from the chemical container may burst.

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.

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 spilled material. Put on appropriate personal protective equipment.

For emergency responders ：If specialized 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".

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. 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. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and Storage

Handling

Protective measures	：Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	：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.

Storage

Conditions for safe storage	：Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

8. Exposure Controls/ Personal Protection

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Occupational exposure limits

Ingredient name	Exposure limits
Distillates(petroleum), hydrotreated heavy paraffinic	Japan Society for Occupational Health (Japan, 5/2020). OEL-M: 3 mg/m³ 8 hours. Form: Mist

Individual protection measures

Respiratory protection ：Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

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.

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.

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.

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.

9. Physical and Chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state ：Liquid［Transparent］

Color	：Light yellow
Odor	：Slight petroleum odor
pH	：Not applicable
Melting point/ freezing point	：Not applicable
Softening point	：Not applicable
Pour point	：≤－10°C (≤14°F)
Boiling point, initial boiling point and boiling range	：195°C (383°F)/ 13Pa (0.1mmHg)
Flash point	：Open cup：≥250°C (≥482°F)
Flammability	：Not available
Lower and upper explosion limit/ flammability limit	：Lower：1% Upper：7%
Vapor pressure	：1.3×10^{-3}Pa (1×10^{-5}Torr) or less （50°C）
Relative vapor density	：Not available
Relative density	：Not available
Density	：0.88 g/cm³（15°C）
Solubility	：Insoluble in the following materials: water.
Partition coefficient	
n-octanol/water	：Not applicable
Auto-ignition temperature	：Not applicable
Decomposition temperature	：Not applicable
Viscosity	：Kinematic (40°C (104°F))：71 mm^2/s (71 cSt)
Particle characteristics	
Median particle size	：Not applicable

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.
Condition to avoid	：Avoid contact with heat, flames and sparks.
Incompatible materials	：No specific data.
Hazardous	：Under normal conditions of storage and use, hazardous

decomposition products	decomposition products should not be produced. Incomplete combustion may result in the production of carbon monoxide and other gases.

11. Toxicological Information

Acute toxicity	：Not available
Acute toxicity estimates	：Not applicable
Irritation/ Corrosion	：Not available
Respiratory sensitization/ Skin sensitization	：Not available
Germ cell mutagenicity	：Not available
Carcinogenicity	：Not available
Reproductive toxicity	：Not available
Specific target organ toxicity （Single exposure）	：Not available
Specific target organ toxicity （repeated exposure）	：Not available
Aspiration hazard	：Not available

12. Ecological Information

Ecotoxicity	：Not available
Persistence/ degradability	：Not available
Bio accumulative potential	：Not available
Mobility in soil	：Not available
Hazardous to the ozone layer	：Not applicable
Other adverse effects	：No known significant effects or critical hazards.

13. Disposal Consideration

Disposal method ：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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport Information

	UN	IMDG	IATA
UN number	Not regulated	Not regulated	Not regulated
UN proper shipping nae	-	-	-
Transport Hazard Class	-	-	-
Packing Group	-	-	-
Environmental hazards	NO.	No.	NO.

15. Regulatory Information

Fire Service Law in Japan

Class ：Specified flammables
Product name/Property ：Combustible liquid
Hazard category ：Not applicable
Precautionary statement ：Not applicable
Designated quantity ：2M^3

Industrial Safety and Health Act in Japan

Substances requiring labelling ：Mineral oil（reference number 2-581）
Chemicals requiring notification ：Mineral oil（reference number 2-581）

Chemical Substances Control Law (CSCL)：None of the components are listed.
Poisonous and Deleterious Substances ：None of the components are listed.
Pollutant Release and Transfer Registers (PRTR)：None of the components are listed.
GHS classification ：Not classified

16. Other Information

Key to abbreviations：ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group UN = United Nations

Procedure used to derive the classification ：Not classified

Export Precautions ：When exporting this product, please contact with our sales department in advance.

Notice to reader To the best of our knowledge, the information contained herein is accurate. However, neither the above- named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

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.