

GHS - SAFETY DATA SHEET

Date: 2023.10.27

Section 1. Identification of the substance/mixture and of the company/undertaking

Product Name **TEOST® 33C Reference Oil – CG -1**

Recommended Use: Calibration and performance verification reference standard for high temperature deposit equipment.

Supplier: Tannas Company/Savant Tech (a division of Savant, Inc.)
4800 James Savage Rd.
Midland, MI 48642 USA

Emergency Phone: 989-496-2301

Section 2. Hazards identification

GHS Classification: This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Label Elements

Hazard pictograms: None

Signal Word: No Signal word.

Hazard Statement: No known significant effects or critical hazards.

Precautionary Statements No precautionary phrases.

Prevention: Not applicable.

Response: Not applicable.

Storage: Not applicable.

Disposal: Not applicable.

Other Hazards: Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Used oil may contain harmful impurities. Not classified as flammable but will burn.

The classification of this material is based on OSHA HCS 2012 criteria.

Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Section 3. Composition/information on ingredients

Substance/Mixture: Substance

Chemical Name: Highly refined mineral oils and additives.

The highly refined mineral oil contains <3% (w/w) DMSO- extract, according to IP346.

Classification based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L).

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* contains one or more of the following CAS-numbers: 64742- 53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-65-0, 68037-01-4, 72623-86-0, 72623-87-1, 8042-47-5, 848301-69-9, 68649-12-7, 151006-60-9, 163149-28-8, 64741-88-4, 64741-89-5.

Other means of Identification:

Base oil – unspecified; Distillates, petroleum, solvent-dewaxed heavy paraffinic; Mineral oil, petroleum distillates, solvent-dewaxed heavy paraffinic; Distillates (petroleum), solvent-dewaxed paraffinic; Base oil – unspecified; Paraffin oil

Chemical Name	CAS-No	Weight %
Interchangeable low viscosity base oil (<20,5 cSt @40°C)*	Not Assigned	0 - 90
Alkaryl amine	36878-20-3	1 - 3

Section 4. First aid measures

- Eye contact:** Flush eye with copious quantities of water.
Remove contact lenses, if present and easy to do. Continue rinsing.
If persistent irritation occurs, obtain medical attention.
- Skin contact:** Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.
If persistent irritation occurs, obtain medical attention.
- Inhalation:** Treat symptomatically.
- Ingestion:** In general, no treatment is necessary unless large quantities are swallowed, however, get medical advice.

Most Important Symptoms/Effects: Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhea.

Indication of immediate medical attention and special treatment needed: When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

Section 5. Fire-fighting measures

Extinguishing media

- Suitable Extinguishing Media:** Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
- Unsuitable Extinguishing Media:** Do not use water jet.
- Special exposure hazards arising from mixture:** Hazardous combustion products may include:

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A complex mixture of airborne solid and liquid particulates and gases (smoke).

Carbon monoxide may evolve if incomplete combustion occurs.

Unidentified organic and inorganic compounds.

Hazardous Combustion Products

Hazardous combustion products may include:

A complex mixture of airborne solid and liquid particulates and gases (smoke).

Carbon monoxide may evolve if incomplete combustion occurs.

Unidentified organic and inorganic compounds.

Special protective equipment for fire-fighters:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for fire-fighters:

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

Section 6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures:

Avoid contact with skin and eyes.

Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material.

Reclaim liquid directly or in an absorbent.

Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

Environmental Precautions:

Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Local authorities should be advised if significant spillages cannot be contained.

Section 7. Handling and storage

Precautions for Safe Handling:

Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

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Advice in general, occupational hygiene:

Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Conditions for Safe Storage:

Avoid strong oxidizing agents.
Keep container tightly closed and in a cool, well-ventilated place.
Use properly labeled and closable containers.

Store at ambient temperature.

Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

Section 8. Exposure controls/personal protection

Occupational Exposure Limits:

OSHA	Component	Type	Value
	Oil mist, mineral	TWA	5mg/m3 as Oil Mist, if Generated

ACGIH

Component	Type	Value
Oil mist, mineral	TWA STEL	5mg/m3 (Inhalable particulate matter)

Appropriate Engineering Controls:

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:

Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General Information:

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure (e.g., personal protective equipment, local exhaust ventilation).

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

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Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

Practice good housekeeping.

Individual Protection Measures, such as Personal Protective Equipment:

Eye/Face Protection:

If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

Hand Protection:

Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g., Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g., frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced.

Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

For continuous contact we recommend gloves with break-through time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material.

Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Skin and Body Protection:

Skin protection is not ordinarily required beyond standard work clothes.

It is good practice to wear chemical resistant gloves.

Respiratory Protection:

No respiratory protection is ordinarily required under normal conditions of use.

In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material.

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.

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Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.

Select a filter suitable for the combination of organic gases and vapours and particles [Type A/Type P boiling point >65°C (149°F)].

General Hygiene Considerations: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers

Section 9. Physical and chemical properties

Appearance	Amber
Physical State	Liquid
Odor	Hydrocarbon-like
Odor Threshold:	Not Available
pH:	Not Available
Pour Point	-45 °C / -49 °F Method: ASTM D97
Melting/Freezing Point:	NA
Initial Boiling Point:	> 280 °C / 536 °F estimated value(s)
Flash Point:	211 °C / 412 °F Method: ASTM D93 (PMCC)
Evaporation Rate:	ND
Flammability (solid, gas):	Not Available
Upper/Lower Flammability or Explosive Limits	
Flammability Limit	
Lower %:	Not Available
Upper %:	
Explosive Limit	
Lower %:	Typical 1 %(V)
Upper %:	Typical 10 %(V)
Vapor Pressure:	< 0.5 Pa (20 °C / 68 °F) estimated value(s)
Vapor Density:	> 1 estimated value(s)
Relative density	0.8578 (15.0 °C / 59.0 °F)
Solubility (water):	negligible
Partition Coefficient	
(n-octanol/water):	log Pow: > 6 (based on information on similar products)
Auto-ignition Temperature:	> 320 °C / 608 °F
Decomposition Temperature:	Not Available
Viscosity:	10.65 mm ² /s (100 °C / 212 °F); 64.6 mm ² /s (40.0 °C / 104.0 °F)

Section 10. Stability and reactivity

Reactivity:	The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
Chemical Stability:	Stable.

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Possibility of Hazardous Reactions:	Reacts with strong oxidizing agents.
Conditions to Avoid:	Extremes of temperature and direct sunlight.
Incompatible Materials:	Strong oxidizing agents.
Hazardous Decomposition Products:	No decomposition if stored and applied as directed.

Section 11. Toxicological information

Information on Toxicological Effects of Substance/Mixture

Inhalation	Unlikely to be harmful
Eye Contact	Remarks: Slightly irritating to the eye., Based on available data, the classification criteria are not met.
Skin Contact	Remarks: Slightly irritating to skin., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis., Based on available data, the classification criteria are not met.
Ingestion	Unlikely to be harmful.
Symptoms Related to the Physical, Chemical and Toxicological Characteristics:	
Eye contact:	No specific data.
Inhalation:	No specific data.
Information on Toxicological Effects	
Acute Toxicity:	Not applicable.
Skin Corrosion / Irritation:	LD50 (Rabbit): > 5,000 mg/kg Remarks: Low toxicity: Based on available data, the classification criteria are not met.
inhalation toxicity	Based on available data, the classification criteria are not met.
Oral toxicity	LD50 (rat): > 5,000 mg/kg Remarks: Low toxicity: Based on available data, the classification criteria are not met.
Serious Eye Damage / Eye	Slightly irritating to the eye., Based on available data, the classification criteria are not met.
Irritation:	
Respiratory or Skin Sensitization	Remarks: Not a skin sensitizer. Based on available data, the classification criteria are not met.
Respiratory Sensitization:	No information available
Skin Sensitization:	Not a skin sensitizer. Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Non mutagenic, based on available data, the classification criteria are not met.

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Mutagenicity:	Not available.
Carcinogenicity:	No known significant effects or critical hazards. Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies., Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).
Reproductive Toxicity:	No known significant effects or critical hazards.
Specific Target Organ Toxicity - Single Exposure	No known significant effects or critical hazards.
Specific Target Organ Toxicity - Repeated Exposure	No known significant effects or critical hazards.
Aspiration Hazard	No known significant effects or critical hazards.
Chronic Effects	No known significant effects or critical hazards.

Section 12. Ecological information

Ecotoxicity:	Not expected to be harmful to aquatic organisms.
Persistence and Degradability:	Not readily biodegradable. Major constituents are inherently biodegradable, but contains components that may persist in the environment. Persistent per IMO criteria. International Oil Pollution Compensation (IOPC) Fund definition: "A non-persistent oil is oil, which, at the time of shipment, consists of hydrocarbon fractions, (a) at least 50% of which, by volume, distills at a temperature of 340°C (645°F) and (b) at least 95% of which, by volume, distils at a temperature of 370°C (700°F) when tested by the ASTM Method D-86/78 or any subsequent revision thereof."
Bio accumulative Potential:	Contains components with the potential to bio-accumulate.
Mobility in Soil:	Liquid under most environmental conditions. If it enters soil, it will adsorb to soil particles and will not be mobile..
Other Adverse Effects:	Does not have ozone depletion potential, photochemical ozone creation potential or global warming potential. Product is a mixture of non-volatile components, which will not be released to air in any significant quantities under normal conditions of use. Poorly soluble mixture. Causes physical fouling of aquatic organisms. Mineral oil does not cause chronic toxicity to aquatic organisms at concentrations less than 1 mg/l.

Section 13. Disposal considerations

Disposal Instructions:	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to
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determine the proper waste classification and disposal methods in compliance with applicable regulations.

Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.

Do not dispose into the environment, in drains or in water courses

Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination.

Waste arising from spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

Contaminated packaging

Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Section 14. Transport information

DOT: Not regulated as dangerous goods.
IMDG: Not regulated as dangerous goods.

Section 15. Regulatory information

CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds): This material does not contain any components with a section 302 EHS TPQ.

CERCLA/SARA - Section 311/312 (Title III Hazard Categories)

Acute Health Hazard: No
 Chronic Health Hazard: No
 Fire Hazard: No
 Pressure Hazard: No
 Reactive Hazard: No

CERCLA/SARA - Section 313 and 40 CFR 372:

The following components are subject to reporting levels established by SARA Title III, Section 313:

Chemical Name		Concentration
Zinc Dialkyl Dithiophosphate	4259-15-8	>= 0.1 - < 1%
Zinc Dialkyl Dithiophosphate	68784-31-6	>= 0.1 - < 1%

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Clean Water Act

This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.

EPA (CERCLA) Reportable Quantity (in pounds):

This material does not contain any chemicals with CERCLA Reportable Quantities.

California Proposition 65:

This material does not contain any chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm.

International Hazard Classification:

Canada:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the Regulations.

WHMIS Hazard Class:

None

National Chemical Inventories

All components are either listed on the US TSCA Inventory or are not regulated under TSCA. All components are either on the DSL, or are exempt from DSL listing requirements.

Section 16. Other information

Issuing Date:	2015 August 17 th
SDS Revision Date:	2023 October 27 th
Revision Note:	Date Extension- Review Completed

This safety data sheet compiles with the requirements of Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EU) No. 1907/2006.

General Disclaimer

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End of Safety Data Sheet