SAFETY DATA SHEET

Revision: 1.1 Date: 17/02/2016

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ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	White Mineral Oil
Chemical Name	White mineral oil (petroleum)
CAS No.	8042-47-5
EINECS No.	232-455-8
REACH Registration No.	None assigned.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s)	Release Agent
Uses Advised Against	None.

1.3 Details of the supplier of the safety data sheet

Company Identification	VISHAY MEASUREMENTS GROUP, INC. Post Office Box 27777 Raleigh, NC 27611 USA
Telephone	919-365-3800
Fax	919-365-3945
E-Mail (competent person)	mm.us@vishaypg.com

1.4 Emergency telephone number (00-1) 703-527-3887
CHEMTREC

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP) Not classified.

2.2 Label elements According to Regulation (EC) No. 1272/2008 (CLP)

Product Name	White Mineral Oil
Hazard Pictogram(s)	None assigned.
Signal Word(s)	None assigned.
Contains:	Not applicable.
Hazard Statement(s)	None assigned.
Precautionary Statement(s)	P103: Read label before use. P101: If medical advice is needed, have product container or label at hand.

2.3 Other hazards None.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	Hazard classification
White mineral oil (petroleum)	100	8042-47-5	232-455-8	Not classified

3.2 Mixtures Not applicable

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Unlikely to be hazardous by inhalation because of the low vapour pressure of the material at ambient temperature. Get medical advice/attention if you feel unwell.
Skin Contact	IF ON SKIN: Wash affected skin with soap and water. If irritation develops and persists, get medical attention. Wash contaminated clothing before reuse. Hot/molten product: In case of burns immediately cool affected skin as long as possible with cold water.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. If hot product is splashed into the eye, it should be cooled immediately to dissipate heat, under cold running water.
Ingestion	IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Do not give milk or alcoholic beverages. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. Obtain medical attention if symptoms appear or if large quantities have been ingested. If aspiration is suspected obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Repeated or prolonged contact may cause defatting of the skin resulting in dryness, cracking and dermatitis. Laxative. May cause irritation: Gastrointestinal tract.

4.3 Indication of any immediate medical attention and special treatment needed

Remove from exposure. Treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	As appropriate for surrounding fire. Extinguish preferably with foam, carbon dioxide or dry chemical.
Unsuitable extinguishing Media	Do not use water jet. Direct water jet may spread the fire. Water extinguishers may cause frothing.

5.2 Special hazards arising from the substance or mixture

Combustion will evolve toxic, irritant and flammable vapours. Thermal decomposition will evolve toxic and flammable vapours. Oxides of carbon and Acrid smoke. Will float and can be reignited on surface water.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Do not allow run-off from fire fighting to enter drains or water courses.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate area. Shut off leaks if without risk. Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Avoid breathing mist/vapours/spray. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. See Section: 8. Ensure adequate ventilation. Caution - spillages may be slippery.

6.2 Environmental precautions

Avoid release to the environment. Do not allow to enter drains, sewers or watercourses. Will float and can be reignited on surface water.

6.3 Methods and material for containment and cleaning up

Contain spillages. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a lidded container for disposal or recovery.Ventilate the area and wash spill site after material pick-up is complete.

6.4	**Reference to other sections**	See Section: 8, 13

7. SECTION 7: HANDLING AND STORAGE

7.1	**Precautions for safe handling**	Ensure adequate ventilation. Avoid breathing mist/vapours/spray. In case of inadequate ventilation wear respiratory protection. Use personal protective equipment as required. See Section: 8. Avoid contact with skin, eyes or clothing. Avoid splashing. Avoid generation of mist (May be flammable). Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.
7.2	**Conditions for safe storage, including any incompatibilities**	Keep container tightly closed, in a cool, well ventilated place. Keep away from heat, sources of ignition and direct sunlight.
	Storage temperature	Store at temperatures not exceeding (°C): 49
	Storage life	Stable under normal conditions.
	Incompatible materials	Avoid contact with: Strong oxidising agents (e.g. liquid chlorine and oxygen), Strong Acids and Alkalis.
7.3	**Specific end use(s)**	Release Agent

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	**Control parameters**	
8.1.1	**Occupational Exposure Limits**	Not established.
8.1.2	**Biological limit value**	Not established.
8.1.3	**PNECs and DNELs**	Not established.
8.2	**Exposure controls**	
8.2.1	**Appropriate engineering controls**	Ensure adequate ventilation or use appropriate containment. Atmospheric levels should be controlled in compliance with the occupational exposure limit. Guarantee that the eye flushing systems and safety showers are located close to the working place.
8.2.2	**Individual protection measures, such as personal protective equipment (PPE)**	General hygiene measures for the handling of chemicals are applicable. Avoid contact with skin, eyes or clothing. Avoid breathing mist/vapours/spray. Wash hands before breaks and after work. Keep work clothes separately. Contaminated clothing should be thoroughly cleaned. Do not eat, drink or smoke at the work place.
	Eye/face protection 	Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).
	Skin protection 	Hand protection: Prolonged exposure - Wear impervious gloves (EN374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Body protection: Wear work clothes with long sleeves. When dealing with heated material: Heat resistant coveralls (with trousers legs over boots and sleeves over cuffs of gloves), heat resistant heavy duty antiskid boots.
	Respiratory protection 	Respiratory protection is not necessary if room is well ventilated. In case of inadequate ventilation wear respiratory protection. Open system(s): Wear suitable respiratory protective equipment.

	Thermal hazards	When dealing with heated material: Heat resistant coveralls (with trousers legs over boots and sleeves over cuffs of gloves), heat resistant heavy duty antiskid boots. Avoid splashing.
8.2.3	**Environmental Exposure Controls**	Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Colourless liquid
Odour	Odourless
Odour Threshold	Not available.
pH	Not established.
Melting Point/Freezing Point	-9 °C
Initial boiling point and boiling range	302 - 427 °C
Flash point	185 °C
Evaporation Rate	Not available.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Flammable Limits (Upper) (%v/v): 1.0 Flammable Limits (Lower) (%v/v): 7.0
Vapour pressure	< 0.1 mm Hg @ 21.1 °C
Vapour density	> 10 (Air = 1)
Relative density	0.85 (H_2O = 1)
Solubility(ies)	Negligible (Water)
Partition coefficient: n-octanol/water	Not established.
Auto-ignition temperature	Not established.
Decomposition Temperature	Not established.
Viscosity	350 SUS @ 37.8°C (≈ 75 mm²/s)
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information Volatile Organic Compound Content: 0%

10. SECTION 10: STABILITY AND REACTIVITY

10.1	**Reactivity**	Stable under normal conditions.
10.2	**Chemical stability**	Stable under normal conditions.
10.3	**Possibility of hazardous reactions**	Combustion or thermal decomposition will evolve toxic and irritant vapours.
10.4	**Conditions to avoid**	Store at temperatures not exceeding (°C): 49. Keep away from heat, sources of ignition and direct sunlight. Avoid splashing. Avoid generation of mist (May be flammable).
10.5	**Incompatible materials**	Avoid contact with: Strong oxidising agents (e.g. liquid chlorine and oxygen), Strong Acids and Alkalis.
10.6	**Hazardous decomposition product(s)**	Thermal decomposition will evolve toxic and flammable vapours. Carbon monoxide, Carbon dioxide and Acrid smoke.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Ingestion	Based on available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: > 2000 mg/kg bw/day
Inhalation	Based on available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: > 20 mg/l
Skin Contact	Based on available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: > 2000 mg/kg bw/day
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.

	Respiratory or skin sensitization	Based on available data, the classification criteria are not met.
	Germ cell mutagenicity	Based on available data, the classification criteria are not met.
	Carcinogenicity	Based on available data, the classification criteria are not met.
	Reproductive toxicity	Based on available data, the classification criteria are not met.
	STOT - single exposure	Based on available data, the classification criteria are not met.
	STOT - repeated exposure	Based on available data, the classification criteria are not met.
	Aspiration hazard	
11.2	**Other information**	None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	**Toxicity**	Based on available data, the classification criteria are not met. Estimated LC50 (96 hour) > 100 mg/l (Fish)
12.2	**Persistence and degradability**	Inherently biodegradable.
12.3	**Bioaccumulative potential**	No data.
12.4	**Mobility in soil**	The substance has low mobility in soil. Poorly water soluble product.
12.5	**Results of PBT and VPVB assessment**	Not classified as PBT or vPvB.
12.6	**Other adverse effects**	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	**Waste treatment methods**	Avoid release to the environment. Dispose of this material and its container as hazardous waste (2008/98/EEC). Containers of this material may be hazardous when empty since they retain product residue.
13.2	**Additional Information**	Dispose of contents in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

		ADR/RID / IMDG / IATA/ICAO
14.1	**UN number**	None assigned.
14.2	**UN proper shipping name**	Not applicable.
14.3	**Transport hazard class(es)**	Not applicable.
14.4	**Packing group**	Not applicable.
14.5	**Environmental hazards**	Not classified as a Marine Pollutant.
14.6	**Special precautions for user**	See Section: 2
14.7	**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
14.8	**Additional Information**	None.

15. SECTION 15: REGULATORY INFORMATION

15.1	**Safety, health and environmental regulations/legislation specific for the substance or mixture**	
15.1.1	**EU regulations**	
	Substance(s) of Very High Concern (SVHCs)	None
	Authorisations and/or Restrictions On Use	None
15.1.2	**National regulations**	
	Wassergefährdungsklasse (Germany)	Water hazard class: 1
15.2	**Chemical Safety Assessment**	Not available.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

References: Existing Safety Data Sheet (SDS), Existing ECHA registration(s) for White Mineral Oil (CAS# 8042-47-5).

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Not classified	Existing ECHA registration for White Mineral Oil

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	vPvT: very Persistent and very Toxic

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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Annex to the extended Safety Data Sheet (eSDS)

No information available.