

Technical Data Sheet

SWISSCUT WATER SOLUBLE GRANITE AND MARBLE CUTTING FLUID



Product Description

SWISSCUT is economical and environment- friendly, long life water-soluble oil, suitable for all moderate machining and grinding operations on all ferrous and non-ferrous metals like aluminum, steel alloys, cast iron and yellow/brown metals except titanium and magnesium. It is formulated with refined naphthenic base oil, natural emulsifiers, corrosion inhibitor package and biocides.

SWISSCUT is a specially compounded bio – stable micro emulsion cutting oil which forms a homogeneous and exceptionally stable emulsion that shows no apparent separation even after long period of usage with hard water or storage for a long time. SWISSCUT is a high molecular weight metal working fluid made out of specialty esters, rust inhibitors, biocides and EP additives. The excellent extreme pressure property provides prolonged tool life and thus increases productivity.

Applications

SWISSCUT is used as Water Soluble cutting oil in Granite and Marble Cutting Applications.

Benefits

- Suitable for ferrous and non –ferrous metals.
- Longer coolant life reduces the overall production cost.
- Built in extreme pressure properties improving tool life.
- Micro droplet structure exhibit exceptional emulsion stability.
- Its low foaming character renders better component visibility and trouble-free operation.
- Reduces wheel loading and dressing frequency.
- Reduces machine down time.
- Reduces disposal and labor costs.

Directions for use

SWISSCUT should be diluted with water in the range of 10:1 to 60:1 depending upon the severity of the operation, work piece material and water hardness. The following practices helps in achieving the full benefits of the product.

- Always add oil to water and never the other way.
- Usage of low hardness (< 200 PPM), Low chlorides (< 30 PPM) water.
- Never add product directly to the sump. Add in the emulsion form.
- Always clean the sump thoroughly before a fresh charge.



Typical Properties

PROPERTIES	TEST METHOD	SWISSCUT
Appearance	Visual	Bright& Clear
Color	-	Amber
Density, g/cm3, @29.5 °C.	ASTM D5002	0.93
Kin. Viscosity, cst @ 40 °C.	ASTM D 445	40
5% in 400 ppm	IS1115	Passes
5% in tap water	IS1115	Passes
Ph Value in 5% distilled water	IS1115	9-9.3
Copper Corrosion	ASTMD 130	1
Cold Stability	IS1115	Passes
Flash Point, COC, ^o C	IS1115	150
Cast Iron Corrosion	IP - 125	0/0-0
Refractometer factor	Internal	1.0 (+/-0.20)
Oil Content		70% minimum

Available Packs: 20, 50 and 210 Litres

Shelf Life - 36 Months from the Manufacturing month.

* All related specifications are meets or exceeds.

Due to continual product research and development, the information contained herein is subject to change without notification. Typical Properties may vary slightly. The Material Safety Data Sheet (MSDS) are available upon request through our sales office.



Material Safety Data Sheet

PRODUCT AND COMPANY IDENTIFICATION 1.

Product Supplier

SWISSCUT PETRELPLUS INC. One World Center, Tower One, 9th Floor, Senapati Bapat Marg, Lower Parel, Mumbai-400013, Maharashtra. Call # +91 22 6216 7072 (Monday to Friday) Cell # +91 93522 25457 marketing@petrelplus.com www.petrelplus.com

COMPOSITION 2.

Blended from selective mineral-based oils, emulsifier and performance-based additives to provide stable emulsion with water.

HAZARDS INDENTIFICATION 3.

HEALTH

Eye contact	-May cause mild irritation to the eyes upon direct contact.
Skin contact	-Prolonged contact may defat the skin or can cause dermatitis.
Inhalation	-hazards.
Ingestion	-Harmful if swallowed.

FIRST-AID MEASURES 4.

Inhalation	-Remove person to fresh air. Seek medical help if discomfort persists.
Ingestion	-Do not induce vomiting. Seek medical support.
Skin Contact	-Immediately flush skin with plenty of water for at least 15 minutes.
Eye Contact	-Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally.

FIRE-FIGHTING METHODS 5.

-Use dry chemical powder or carbon di - oxide or foam. Extinguishing media Special protective equipment -Positive pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURE

Personal protection	- Adequate ventilation, gloves, goggles, overalls and boots.
Environmental precautions	- Avoid entry into water courses.
Clean up method	- Absorb on inert material.

STORAGE AND HANDLING 7.

Handling - Impervious gloves & eye protection ensure good ventilation. Keep away from source of ignition. - Store in a cool & dry place. Storage

EXPOSURE CONTROL / PERSONAL PROTECTION 8.

Respiratory protection	 Not required under normal conditions.
Skin/hand protection	 Impervious gloves, overalls, and boots.
Eye protection	- Use Goggles

TYPICAL PROPERTIES 9.

Viscosity @ 40 ⁰ C	- 40
Flash Point, ^o C	- 150
5% in 400 ppm	- Passes
5% in tap water	- Passes

10. STABILITY AND REACTIVITY

Stability	- Stable
Conditions to avoid	- Excessive ter
Materials to avoid	 Strong oxidiz
Hazardous decomposition products	- Oxides of car

- emperatures
- izers
- rbon and nitrogen



11. TOXICOLOGICAL INFORMATION

Skin contact	- Possible irritation
Eye contact	- Possible irritation
Inhalation	- Not applicable
Ingestion	- Irritation. May cause lung damage.
Long term effect	- Not known

12. ECOLOGICAL INFORMATION

- Mobile
- Low
-Not expected
- Water pollutant

13. DISPOSAL CONSIDERATIONS

Dispose of according to local and national regulations.

14. TRANSPORT INFOMRATION

CPL	- Not applicable
IMO	-Not applicable

-Not applicable

15. REGULATORY INFORMATION Symbol(s) -Not applicable Phrase(s) - Not applicable

Phrase(s) - Not applicable

16. OTHER INFORMATION: PRODUCT SAFETY

For safety reasons, it is IMPERATIVE that customer: -Ensure that all those within their control who use the products are supplied with all relevant information contained within the Material Safety Data Sheet and Technical Bulletin concerning the applications for which the product is designed and any instructions or warning.