



Material Safety Data Sheet-Coolube H1

1. IDENTIFICATION OF THE SUBSTANCE/COMPANY INFORMATION

6/21/09

Commercial Name: Coolube H1
Chemical Name: Mixed Esters of naturally occurring refined fatty acids
Chemical Family: Mixed Esters
Supplier Name: UNIST, Inc.
Address: 4134 - 36th Street SE
Grand Rapids, MI 49512
Phone no: (800) 253-5462 alternatively (616) 949-0853
Fax no: (616) 949-9503

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Composition: Composition based on natural esters
The components of this product are in compliance with the chemical notification requirements of the EPA TSCA.

Health hazardous components: None

Substances required to be listed without contributing to the classification of the composition:

<u>Hazardous components:</u>	<u>Wt %:</u>	<u>Classification, risk phrase:</u>
None	-	-

3. HAZARDS IDENTIFICATION

Health: Under intended use, the product is considered as non-toxic and safe.

Skin: Contact not expected to cause serious irritation.
Eyes: Contact not expected to cause serious irritation.
Ingesting: No evidence of adverse effects from available information
Inhalation: Vegetable oil mists are classified as "nuisance particulates" by the American Conference of Governmental Industrial Hygienists (no health effects reported)

Environment: Avoid releases to the environment.
Experiments made on this and similar products indicate that the product can be considered a low danger to the environment. However, regulations forbid the disposal of lubricants in the environment without special permit.

Physical-chemical hazards: No particular risk of ignition or explosion.

Specific risks: None

The product is considered not hazardous according to the EU Dangerous Substances/Preparations Directives classification scheme (67/548/EEG, last amended by EU Directive 1999/45/EG).

4. FIRST AID MEASURES

Inhalation: Remove to fresh air.
Skin contact: Wash with detergent and water.
Eye splashes: Flush with generous amounts of temperate water for a minimum of 15 minutes. Seek medical help if the problems remain.
Ingestion: Drink moderate amounts of water or milk. Do not induce vomiting. Contact medical professional if any adverse reactions are noticed.

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5. FIRE-FIGHTING MEASURES

Extinguishing media

recommended: CO₂, dry powder, foam.
not recommended: Water in a jet.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: None necessary.
Environment protection: Avoid pollution of sewers and water.
Cleaning means: Removal with inert absorbent or sand.

7. HANDLING AND STORAGE

Handling

Personal protection: Avoid prolonged and repeated contact with skin. Remove soaked clothes.

Storage

Recommended conditions: Storage temperature +5 to +40 °C. Store in closed container, preferably as delivered. Storage stability is at least 12 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Technical measures: Exposure should be minimized preferably with technical measures rather than personal protective equipment.

Personal protective equipment

Respiratory protection: Not necessary in normal use.
Hand protection: Impermeable gloves recommended (e.g. PVC or rubber gloves).
Eye protection: Safety goggles recommended.
Others: Not necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Low viscous oil
Viscosity (40°C): 10 mm²/s (cSt)
Color: Yellowish fluid
Odor: Vegetable oil related
pH value: Not applicable
Flash point (Open Cup): >200 °C, >400F(COC)
Pourability: -12 to -20 °C
Auto ignition temperature: Not applicable
Explosion range: Not applicable
Vapor pressure: Negligible under normal conditions
Density (20°C): Approx. 890 kg/m³
Solubility in water: Insoluble
Solubility in organic solvents: Soluble

10. STABILITY AND REACTIVITY

Stability: Stable product under ordinary conditions.
Hazardous reactions: None known.
Conditions to be avoided: Elevated temperatures (>>100°C), acids and strong oxidizing agents.
Hazardous decomposition products: Thermal decomposition (>>200°C) will result in carbon monoxide, carbon dioxide, and hydrocarbons (CH_x). No carcinogenic products of combustion.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (OECD 401): LD₅₀ rat >2000 mg/kg, i.e. not toxic
Skin irritation (OECD 404): Not tested.

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12. ECOLOGICAL INFORMATION

Biodegradability: The product is **readily biodegradable** according to CEC L-33-A-93 (>80 % in 21 days).

13. DISPOSAL CONSIDERATIONS

Used product: As per existing regulations.
Used packaging: As per existing regulations.

14. TRANSPORT INFORMATION

The product is not classified as dangerous goods.

15. REGULATORY INFORMATION

Symbols: None
Risk phrases: None
Safety phrases: None

No labelling required according to EU Regulations.

Superfund Ammendments and Reauthorization At of 1986(SARA) Title III requires submission of annual reports of toxic chemicals that appear in 40 CFR 372(for SARA 313). This information must be included in all MSDSs that are copied and distributed for this material. Components present in the product at a level which could require reporting under the statute are:
None

16. OTHER INFORMATION

Coolube 2210 is a neat metalworking oil with superior lubricating properties. The product is based on vegetable oils and natural esters and should be used undiluted in, for example, minimal lubrication applicators.

This product (or components, if a mixture) has not been found to be a carcinogen or potential carcinogen by IARC; is not listed in the NTP Third Annual Report; nor is it regulated by OSHA as a carcinogen.

The information presented herein has been compiled from sources considered by the company, in good faith, to be dependable and is accurate and reliable to the best of our knowledge and belief. However, the company cannot make any warranty or representation respecting the accuracy or completeness of the data and assumes no responsibility for any liability or damages relating thereto or for advising you regarding the protection of your employees, customers, or others. Users should make their own tests to determine the applicability or such information or suitability of any products for specific use.

HMIS Rating (USA):

Health:	0
Flammability:	0
Physical Hazard:	0

0=Minimal, 1= Slight, 2=Moderate,
3= Serious, 4=Severe
*=Chronic Health Hazard

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