

MATERIAL SAFETY DATA SHEET

Effective Date : Sep. 18, 2008(Rev. 1)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : DIESEL CLEANER IC-U25

MANUFACTURE : YUKASANGYO CO., LTD.

1-18-14, Ebisu, Shibuya-ku, Tokyo

150-0013 JAPAN

EMERGENCY PHONE : +81-03-5791-4123 FACSIMILE : +81-03-5791-4124

2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture : Mixture

Component	CSCL No.	CAS No.	EINECS No.	Content
alkylamineethoxylate	7-60	1541-67-9	216-277-8	65-75
2-(2-Butoxyethoxy)ethanol	2-422	112-34-5	203-961-6	5-15
Diethylene Glycol Di-n-butyl Ether	2-3870	112-73-2	204-001-9	5-15
1-Methyl-2-pyrrolidinone	5-113	872-50-4	212-828-1	5-10
Water	—	7732-18-5	231-791-2	1-5

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Yellow or pale yellow liquid.

Inflammable. Harmful by inhalation and if swallowed. Contact with eyes or skin causes irritation.

POTENTIAL HEALTH EFFECTS

EYE : Contact cause severe injure.

SKIN : Contact may cause irritation.

INGESTION : Harmful if swallow.

INHALATION : Inhalation may cause irritation to the respiratory tract (nose, mouse, mucous membranes)

CHRONIC EFFECTS : Not determined.

4. FIRST AID MEASURES

EYE : Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

SKIN : Wash skin thoroughly with plenty of water and soap. If any skin problem occurs, get medical attention.

INGESTION : If swallowed, do not induce vomiting. Immediately give two glasses of water. Call a physician immediately. Do not give anything to an unconscious person.

INHALATION : Immediately remove to fresh air. If not breathing, give artificial respiration. Call a physician.

5. FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT : No data.

FLAMMABLE LIMIT : No data.

EXTINGUISHED MEDIA : Carbon dioxide, dry chemical, powder, sand, or foam extinguisher. Don't use water extinguisher to avoid fire diffusion.

FIRE & EXPLOSION HAZARDS : Dense smoke emitted when burned without sufficient oxygen.

FIRE FIGHTING EQUIPMENT : Wear fire protection tools (globe, glasses, gas-mask, etc). Combustion fume may contain poisonous gas as nitrogen gas, etc. Avoid to inhale its fume using proper breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

General Information : Use proper personal protective equipment as indicated in Section 8.

Small spills : Absorb spill with dry sand, absorbent mat or the like, then recover into containers.

Large spills : Remove all sources of ignition.

Dike or impound spilled material and control further spillage.

Absorb spill with dry sand, absorbent mat or the like, then recover into containers.

Flush residual spill(area) with copious amount of water.

7. HANDLING AND STORAGE

HANDLING : Eliminate source of ignition.

When handling at elevated temperature, provide adequate ventilation.

Avoid rough handling or dropping.

STORAGE : Storage under room temperature.

Keep container closed. Keep away from heat and open flame.

8. EXPOSE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION : Protective goggles.

SKIN PROTECTION : Chemical resistant gloves and work clothes.

RESPIRATORY PROTECTION : respiration mask.

EXPOSURE GUIDELINE(S) OR LIMITS : Not established.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Yellow or pale yellow liquid.

ODOR : Slight ammonia odor

BOILING POINT : Not determined.

SPECIFIC GRAVITY : 0.923(15/4°C)

CONGEAL POINT : Not determined

pH : 9 ~ 10 (1%aq)

SOLUBILITY IN WATER : Almost not soluble

SOLUBILITY IN LOWER ALCOHOL : Soluble

10. STABILITY AND REACTIVITY

STABILITY(CONDITION TO AVOID)	: Stable.(Avoid high temperature, sparks, or open flames.)
INCOMPATIBILITY	: Strong Acids and strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCT	: Carbon dioxide, some carbon monoxide, oxides of nitrogen.
HAZARDOUS POLYMERIZATION	: Will not occur.

11. TOXICOLOGICAL INFORMATION

1. alkylamineethoxylate

ACUTE ORAL EFFECTS	: No data.
ACUTE DERMALTOXICITY	: Similar material : tallow amine(EO2). 1,850mg/kg
IRRITANT PROPERTIES	: Eye..... ·No data. Similar material : tallow amine(EO2) : may swell and causes scab when coated. (rat)
	: Skin..... ·No data. Similar material : tallow amine(EO2) : 1 drop, 24hours: may cause heavy dropsy and hemorrhage

2. 2-(2-Butoxyethoxy)ethanol

ACUTE ORAL EFFECTS	: LD50 6560mg/kg (rat)
ACUTE DERMALTOXICITY	: LD50 4120mg/kg (rabbit)
IRRITANT PROPERTIES	: Eye..... ·cause irritant. : Skin..... ·may cause mild skin irritant.

3. Diethylene Glycol Di-n-butyl Ether

ACUTE ORAL EFFECTS	: LD50 3900mg/kg (rat)
ACUTE DERMALTOXICITY	: LD50 3555mg/kg (rabbit)
IRRITANT PROPERTIES	: Eye..... ·may cause slight irritant. : Skin..... ·may cause slight irritant.

4. 1-Methyl-2-pyrrolidinone

ACUTE ORAL EFFECTS	: LD50 7725mg/kg (rat)
ACUTE DERMALTOXICITY	: LD50 8000mg/kg (rabbit)
IRRITANT PROPERTIES	: Eye..... ·may cause slight irritant. : Skin..... ·may cause slight irritant.

12. ECOLOGICAL INFORMATION

BIODEGRADATION	: No information.
ECOTOXICITY	: No information.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. TRANSPORT INFORMATION

International regulation
Ocean transportation :IMDG
Aviation transportation :IATA
UN CLASS :8 (corrosive materials)
UN Number :2735 Amines (liquid, corrosive)
Container classification :8

Keep container closed. Avoid rough handling or dropping.

15. REGULATORY INFORMATION

TSCA STATUS : All components are listed on the TSCA inventory.

16. OTHER INFORMATION

This information above is to the best of our knowledge, although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Users should make their own investigations to determine the suitability of information for their particular purpose.