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MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : ULTRA CLEAN US50

ULTRA CLEAN SUPPLIER : CLEANER PLUS

ADDRESS : 711/59 Theparak Rd. Phraeksa Mai Subdistrict,

Mueang District, Samut Prakan Province 10280 Thailand

DIVISION : Chemical Division

TELEPHONE NUMBER : +66613936792

EMAIL : sale@thaicleaning.com

EMERGENCY TELEPHONE NUMBER : +66613936792

RECOMMENDED USE : Only for surface finishing industrial use

2. HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS AND : None EFFECTS

GHS CLASSIFICATION

PHYSICAL AND CHEMICAL HAZARDS

CORROSIVE TO METALS : None

HEALTH HAZARDS

ACUTE TOXICITY (Oral) : Category 5

ACUTE TOXICITY (Dermal) : Category 5

ACUTE TOXICITY (Inhalation) : Category 5

SKIN CORROSION / IRRITATION : Category 3

SERIOUS EYE DAMAGE/EYE : Category 2B IRRITATION
RESPIRATORY SENSITIZATION : Classification not possible

SKIN SENSITIZATION : Category 1

GERM CELL MUTAGENICITY : Classification not possible
CARCINOGENICITY : Classification not possible
REPRODUCTIVE TOXICITY : Classification not possible

SPECIFIC TARGET ORGAN TOXICITY

SINGLE EXPOSURE : Classification not possible
 REPEATED EXPOSURE : Classification not possible
 ASPIRATION HAZARD : Classification not possible

ENVIRONMENTAL HAZARDS

HAZARDOUS TO THE AQUATIC

ENVIRONMENT

- ACUTE TOXICITY : Category 3
- CHRONIC TOXICITY : Category 4

GHS LABEL ELEMENTS

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PICTOGRAMS OR SYMBOLS

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SIGNAL WORD : Warning

HAZARD STATEMENTS : Harmful for long term skin contact

Harmful for direct eye contact

Harmful for Ingestion

Harmful to aquatic life

PRECAUTIONARY STATEMENTS

PREVENTION : Keep only in original container.

Do not breathe dust/fume/gas/mist/vapors'/spray.

Avoid release to the environment.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Wear protective gloves/eye protection/face

Protection/protective clothing.

RESPONSE: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for

breathing.

IF SWALLOWED : Rinse mouth. Do NOT induce vomiting.

IF IN EYES : Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN (or hair) : Remove/take off immediately all contaminated

Clothing. Rinse skin with water/shower; call a POISON CENTRE or doctor/physician.

IF exposed : Call a POISON CENTER or doctor/physician.

Absorb spillage to prevent material damage.

STORAGE : Store in a cool dry area, in a closed container. Avoid extremes of

temperature.

DISPOSAL : Passed to a licensed waste contractor.

SAFE HANDLING ADVICE : Refer to MSDS.

This product may form separation according to the storage condition.

In that case, please agitate or stir, then use as homogenous liquid.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE OR MIXTURE : Mixture

INGREDIENTS AND CONCENTRATION : Aqueous solution of mixtures of amine group compound RANGE

Ingredients Concentration Range (%) CAS No.

Solids/Amine Compound <60% proprietary

Surfactant <20% 166736-08-9

Water Balance -

4. FIRST-AID MEASURES

IN CASE OF INHALATION : Remove to fresh air and keep at rest in a position comfortable for

breathing.

IN CASE OF SKIN CONTACT : Remove/take off immediately all contaminated clothing. Rinse skin with

water/shower. Call a POISON CENTRE or doctor/physician.

IN CASE OF EYE CONTACT : Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing, Immediately call a POISON CENTRE or doctor/physician.

IN CASE OF INGESTION : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON

CENTER or doctor/physician.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA : Extinguishing media governed by other materials present. Water spray

preferred due to diluting effect. Self contained breathing apparatus should be worn.

NOT SUITABLE EXTINGUISHING MEDIA : No information available SPECIFIC HAZARDS: No information available

SPECIFIC METHODS : Keep away from sources of ignition and use appropriate extinguishing

media. Fight fire from upwind position if possible.

PROTECTION OF FIRE FIGHTERS : The product is not flammable. Under certain circumstances, used by other materials, the formation of other toxic substances cannot be excluded. Use goggles in combination with dust mask,: and

another protections as appropriate to situation.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS : Use goggles and protective gloves. PROTECTIVE EQUIPMENT AND

Large spills: Remove person to safety.

EMERGENCY PROCEDURE Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS : Avoid release to the environment.

METHODS FOR CLEANING UP Collect the chemicals and flush the area with plenty of water

PREVENTION OF SECONDARY : No information available

HAZARDS

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7. HANDLING AND STORAGE

HANDLING

TECHNICAL MEASURES : Facilities storing or utilizing this material should be equipped with an

eyewash facility and a safety shower.

PRECAUTIONS : Avoid contact with eyes and skin. This product may form separation

according to the storage condition. In that case, please agitate or stir, then use as homogenous liquid.

SAFE HANDLING ADVICE : Use adequate ventilation. Wash thoroughly after handling. Use

personal protective equipment as required

Do not breathe dust/fume/gas/mist/vapors'/spray.

Do not eat, drink or smoke when using this product.

Avoid contact with acid.

STORAGE

SUITABLE STORAGE CONDITIONS : Store container tightly closed in well-ventilated place.

Store in a cool dry area, in a closed container.

Avoid extremes of temperature.

SAFE PACKAGING MATERIALS : No information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES : Facilities storing or utilizing this material should be equipped

With eyewash facility and a safety shower.

Use adequate ventilation.

LIMIT VALUES

ACGIH (TLV) : No information available

OSHA (PEL) : No information available

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION : Use chemical cartridge respirator, as appropriate to situation.

HAND PROTECTION : Chemical protection gloves. PVC is a suitable material of construction.

EYE PROTECTION : Safety goggles or Face shield

SKIN AND BODY PROTECTION : Long sleeved overall, rubber apron and face shield. Impermeable safety

footwear HYGIENE MEASURES: No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATES

FORM : Liquid
COLOUR : Yellow

ODOUR : Slightly unpleasant

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oH : 8.0-12.0 (3% solution, at 25°C)

SPECIFIC TEMPERATURES / TEMPERATURE RANGES

AT WHICH CHANGES IN PHYSICAL STATE OCCUR

BOILING POINT : Not applicable

MELTING POINT : Not applicable

FLASH POINT : Not applicable

FLAMMABILITY OR EXPLOSIVE PROPERTIES

FLAMMABILITY OR EXPLOSIVE : Not applicable
LIMITS Not applicable VAPOUR PRESSURE : Not applicable
VAPOUR DENSITY : Not applicable

DENSITY (SPECIFIC GRAVITY) : 1.007-1.029 g/ml (3% solution, at 25 0 C)

SOLUBILITY

WATER SOLUBILITY Miscible

SOLVENT SOLUBILITY : No information available PARTITION COEFFICIENT: n- : No information available

OCTANOL / WATER (log pow)

AUTO-IGNITION TEMPERATURE : No information available

DECOMPOSITION TEMPERATURE : No information available

ODOUR THRESHOLD : No information available

EVAPORATION RATE : No information available

FLAMMABILITY (SOLID, GAS) : No information available

VISCOSITY : No information available

OTHER DATA : No information available

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY : Stable at ambient temperatures

POSSIBILITY OF HAZARDOUS : None.

REACTIONS CONDITIONS TO AVOID : Strong acid.

INCOMPATIBLE MATERIALS : Strong acid.

HAZARDOUS DECOMPOSITION : None.

PRODUCTS OTHERS : No information available

11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS : See section 4 for symptoms of exposure and effects. Likely routes of

exposure are skin, eyes, and inhalation

ACUTE TOXICITY DATA : No information available
CHRONIC EFFECTS ON HUMANS : No information available

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MUTAGENICITY : No information available (GERM CELL MUTAGENICITY)

CARCINOGENICITY : No information available

REPRODUCTIVE TOXICITY : No information available

SPECIFIC TARGET ORGAN TOXICITY

- SINGLE EXPOSURE : No information available
- REPEATED EXPOSURE : No information available
ASPIRATION HAZARD : No information available

Avoid swallowing and long term skin contact

12. ECOLOGICAL INFORMATION

OTHER INFORMATION

ECOTOXICITY : No information available
PERSISTENCE / DEGRADABILITY : No information available
MOBILITY IN SOIL : No information available
BIOACCUMULATIVE POTENTIAL : No information available

OTHER ADVERSE EFFECTS : No specific data available. However, due to the nature of the product,

: No information available

discharge of untreated product especially from point sources may cause damage to the aquatic environment. Low concentrations act as plant nutrients.

13. DISPOSAL CONSIDERATIONS

Dilute, neutralize and disposal in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

Follow all regulations in your country or region

INTERNATIONAL REGULATIONS

UN CLASS / UN NUMBER : No information available

SPECIAL PRECAUTIONS FOR USER : Review "ACCIDENTAL RELEASE MEASURES (Section 6)". Review

"HANDLING AND STORAGE (Section 7)". Ensure containers without breakage or leakage. Ensure containers tightly fixed.

Follow all regulations in your country or region.

15. REGULATORY INFORMATION

Follow all regulations in your country or region. PENC is not able to check up the regulatory information in regard to the substances in your country or region; therefore, we request this matter would be filled by your responsibility.

16. OTHER INFORMATION

All data are based on our current knowledge. They do not indicate any warranty or representation. We disclaim all liability relating to use of material as this is beyond our control.