Date of revision : 2022/09/26

# Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking Product identifier: Product name: Super Check Developer UD-T Product code (SDS NO): CD024\_E1-7 Relevant identified uses of the product: Non Destructive Testing Details of the supplier of the safety data sheet Manufacturer/Supplier: MARKTEC CORPORATION Address: 17-35, OMORI-NISHI, 4-Chome, OTA-Ku, TOKYO 143-0015 JAPAN Telephone number: +81-3-3762-4453 FAX: +81-3-3768-3958 2. Hazards identification GHS classification and label elements of the product Classification of the substance or mixture PHYSICAL AND CHEMICAL HAZARDS Flammable liquids: Category 2 **HEALTH HAZARDS** Skin corrosion/irritation: Category 2 Reproductive toxicity: Category 1B Aspiration hazard: Category 1 **ENVIRONMENT HAZARDS** Hazardous to the aquatic environment (Acute): Category 2 Hazardous to the aquatic environment (Long-term): Category 2 Label elements Signal word: Danger HAZARD STATEMENT Highly flammable liquid and vapor Causes skin irritation May damage fertility or the unborn child May be fatal if swallowed and enters airways Toxic to aquatic life Toxic to aquatic life with long lasting effects PRECAUTIONARY STATEMENT Prevention Avoid release to the environment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

Wash contaminated parts thoroughly after handling. Use personal protective equipment as required. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Response In case of fire: Use appropriate media to extinguish. Collect spillage. Get medical advice/attention if you feel unwell. IF exposed or concerned: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do NOT induce vomiting. IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician. Storage Store in a well-ventilated place. Keep container tightly closed. Keep cool. Disposal Dispose of contents/container in accordance with local/national regulation.

Specific Physical and Chemical hazards

Highly flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Mixture/Substance selection:

Mixture

Ingredient name	Content (%)	CAS No.
Ethyl alcohol	70 - 80	64-17-5
Heptane	16	142-82-5
Inorganic powder A	1 - 10	Registered
Inorganic powder B	1 - 10	Registered
Surfactant	0.1 - 2	Registered
1-Methyl-2-pyrrolidinone	1.1	872-50-4

Note : The figures shown above are not the specifications of the product.

# 4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical advice/attention if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician if you feel unwell.

### IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention.

#### IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Do not let the victim rub his eyes.

If eye irritation persists: Get medical advice/attention.

# IF SWALLOWED

Do NOT induce vomiting. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor/physician.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

In case of fire, use foam, alcohol-resistant foam, dry powder, CO2 to extinguish.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

# 6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Be careful not to slip on spilled area.

Eliminate all sources of ignition and ventilate the area.

### Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Preventive measures for secondary accident

Collect spillage.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent entry into waterways, sewers, basements or confined areas.

#### 7. Handling and storage

Precautions for safe handling

#### Preventive measures

(Exposure Control for handling personnel)

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

(Protective measures against fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Ground and bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use non-sparking tools.

Take action to prevent static discharges.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments) Avoid contact with skin. Avoid contact with eyes. Vapors may cause dizziness or suffocation. Safety Measures Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wear protective gloves/eye protection/face protection. Use personal protective equipment as required. Any incompatibilities data is not available. Advice on general occupational hygiene Wash contaminated parts thoroughly after handling. Take off contaminated clothing and wash it before reuse. Wash hands thoroughly after handling. Storage Conditions for safe storage Store in a well-ventilated place. Keep container tightly closed. Keep cool. Do not place in a place where rust is likely to occur. Container and packaging materials for safe handling data is not available. 8. Exposure controls/personal protection Control parameters Adopted value (Ethyl alcohol) ACGIH(2009) STEL: 1000ppm (URT irr) (Heptane) ACGIH(1979) TWA: 400ppm; STEL: 500ppm (CNS impair; URT irr) Exposure controls Appropriate engineering controls Do not use in areas without adequate ventilation. Individual protection measures Respiratory protection In case of inadequate ventilation wear respiratory protection. Hand protection Wear protective gloves. Eye protection Wear eye/face protection. Skin and body protection Wear protective clothing.

#### 9. Physical and Chemical Properties

Information on basic physical and chemical properties Physical state: Liquid Color: White Odor: Alcoholic odor Melting point/Freezing point data is not available. Boiling point or initial boiling point: 78°C Flammability (gases, liquids and solids) data is not available. Lower and upper explosion limit/flammability limit data is not available. Flash point: -4°C Auto-ignition temperature: 204°C Decomposition temperature data is not available. pH data is not available. Kinematic viscosity: Kinematic viscosity <= 20.5 mm2/s Solubility: Solubility in water: Soluble n-Octanol/water partition coefficient data is not available. Vapor pressure data is not available. Density and/or relative density: 0.81g/cm3(15°C) Relative vapor density (Air=1) data is not available. Particle characteristics data is not available.

10. Stability and Reactivity

# Reactivity

Reactivity data is not available.

# Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

Vapors may catch fire and explode.

Conditions to avoid

Conditions to avoid data is not available.

Incompatible materials

Strong acids, Strong bases, Strong oxidizing agents

Hazardous decomposition products Carbon oxides

11. Toxicological Information Information on toxicological effects Acute toxicity data is not available. Irritant properties Skin corrosion/irritation data is not available. Serious eye damage/irritation data is not available. Allergenic and sensitizing effects data is not available. Mutagenic effects data is not available. Carcinogenicity [IARC] (Ethyl alcohol) Group 1 : Carcinogenic to humans [ACGIH] (Ethyl alcohol) A3(2009) : Confirmed Animal Carcinogen with Unknown Relevance to Humans Reproductive toxicity data is not available. STOT STOT-single exposure data is not available. STOT-repeated exposure data is not available. Aspiration hazard data is not available. Information on other hazards Data on the preparation itself is not available.

12. Ecological Information Ecotoxicity Aquatic toxicity

Toxic to aquatic life Toxic to aquatic life with long lasting effects Water solubility (Ethyl alcohol) miscible (ICSC, 2000) (Heptane) none (ICSC, 1997) (Inorganic powder A) very poor (0.01 g/100 ml, 20°C) (ICSC, 2010) (1-Methyl-2-pyrrolidinone) 100 g/100 ml (SRC, 2005) Persistence and degradability (Ethyl alcohol) Degrade rapidly (BOD\_Degradation : 89% (METI existing chemical safety inspections, 1993)) (Heptane) Degrade rapidly (BOD\_Degradation : 101% (METI existing chemical safety inspections, 1996)) (1-Methyl-2-pyrrolidinone) Degrade rapidly(BOD\_NO2\_Degradation : 73%/28 days; BOD\_NH3\_Degradation : 94%/28 days; TOC\_Degradation: 96%/28 days; GC\_Degradation : 100%/28 days (MITI official bulletin, 1989)) Bioaccumulative potential (Ethyl alcohol) log Pow=-0.32 (ICSC, 2000) (Heptane) log Pow=4.66 (ICSC, 1997) (1-Methyl-2-pyrrolidinone) log Pow=-0.38 (ICSC, 2014) Mobility in soil Mobility in soil data is not available. Other adverse effects Ozone depleting chemical data is not available. Additional data Data on the preparation itself is not available. 13. Disposal considerations Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Avoid release to the environment. Dispose of contents/container in accordance with local/national regulation. 14. Transport Information UN No., UN CLASS UN No. or ID No.: 1993 UN Proper Shipping Name : FLAMMABLE LIQUID, N.O.S.(Ethyl alcohol/Heptanes mixture) Class or division (Transport hazard class): 3 Packing group : II ERG GUIDE No.: 127 Environmental hazards MARPOL Annex III - Prevention of pollution by harmful substances Marine pollutants (yes/no) : yes

# 15. Regulatory Information

#### Other regulatory information

Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.

Regulatory information in this section are limited to intentional ingredient(s), but does not contain information on non-intentional ingredients or impurities which are not informed by supplier(s).

# 16. Other information

# Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN IATA Dangerous Goods Regulations (62nd Edition) 2021 2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2022 TLVs and BEIs. (ACGIH) Supplier's data/information

#### **General Disclaimer**

To the best of our knowledge, the information contained here in is accurate. However, we assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of user. All material may present unknown hazards and should be used in caution. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist.

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The GHS classification data given here is based on current EU official data (Consolidated version of the CLP Regulation published in 1.3.2022 and Commission delegated regulation (EU) 2021/849 (ATP17)).