

化学品安全技术说明书

Material Safety Data Sheet

Ver: 202212

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:	GDIsoPar IDD
Company:	Shandong GreenDee New Material Technology Co.,Ltd.
Add:	No.7, Fuxing North Road, Taozhuang Town, Xuecheng District, Zaozhuang City, Shandong Province

SECTION 2: HAZARDS IDENTIFICATION

Emergency Situation Overview:	Colorless and transparent liquid, with a faint smell. H227: Flammable liquid. H304: Swallowing and inhalation into the respiratory tract may be fatal. This product can accumulate static electricity, which may cause ignition. This material will release vapor to form a flammable mixture gas. If the vapor accumulates and is ignited, it will flash or explode. Flammable May irritate eyes, nose, throat and lungs. Repeated contact may cause dryness or cracking of the skin. The hazard classification of this material is consistent with the General Rules for Classification, Hazard Communication and Hazard Warning of Chemicals (GB13690-2009).
Classification of the GHS:	Flammable liquids: Category 4 Inhalation toxins: Category 1 Label elements: Pictographic  Warning word: Danger
Physical and chemical hazards:	This product can accumulate static electricity, which may cause ignition. This material will release vapor to form a flammable mixture gas. If the vapor accumulates and is ignited, it will flash or explode. Flammable
Health hazard:	May irritate eyes, nose, throat and lungs. Repeated contact may cause

	dryness or cracking of the skin.
Environmental hazard:	No obvious harm
Note:	Without consulting experts, this product cannot be used for any purpose other than those specifically stipulated in Part 1. Health studies have shown that chemical exposure may pose potential risks to human health, and these risks vary from person to person.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INCI	CAS-No.	Content, %
ISODODECANE	13475-82-6	100

SECTION 4: FIRST AID MEASURES

Skin Exposure:	In case of contact, immediately wash skin with soap and copious amounts of water. If irritation persists, call a physician.
Eye Exposure:	Separate the eyelids and thoroughly rinse the skin with running water. Seek medical attention immediately.
Inhalation Exposure:	If inhal, remove to fresh air. If necessary, get medical attention.
Oral Exposure:	Seek medical treatment immediately. Not induce vomiting.

SECTION 5: FIRE FIGHTING MEASURES

Hazardous characteristic:	flammable
Fire extinguishing method and agent:	Use fire water mist, foam, dry chemical agents (dry powder) or carbon dioxide (CO ₂) for extinguishing.
Fire protection measures:	Fire Extinguishing Instructions: Evacuate the area. Prevent the spread of the fire or the dilute effluent from flowing into rivers, sewers or drinking water sources. Firefighters should use standard protective equipment and, in enclosed spaces, should use self-contained breathing apparatus (SCBA). Use water spraying to cool the exposed surfaces and protect the personnel. Fire Hazard: Flammable Hazardous Combustion Products: Incomplete combustion products, carbon oxides, thick smoke Flammability Flash Point [Test Method]: 61 °C (142 ° F) - 66 °C (151 ° F) Flammable limit (in air %vol.): Lower explosive limit (LEL): 0.6 Upper explosive limit (UEL): 6.0 Self-ignition temperature: 222 °C (432 ° F) [extrapolated, extrapolated value]

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency treatment:	Avoid contact with spilled products. In cases where the materials are toxic or flammable, warnings or evacuation of residents in the surrounding and upwind areas should be given. For fire-fighting information, see Part 5. For major hazards, refer to the Hazard Overview section. For first aid instructions, see Part 4. For personal basic protective equipment, refer to Part 8. Additional protective measures may be necessary depending on the considerations and professional judgment of the emergency personnel regarding individual special circumstances. Emergency Response: Respiratory Protection: Use a half-face or full-face respirator for organic vapors, and use a hydrogen sulfide or self-contained breathing apparatus (SCBA) when in use, based on the size of the leakage and potential exposure levels. If the exposure level cannot be determined or if in an oxygen-deficient environment, a respirator (SCBA) is recommended. It is recommended to use work gloves that can withstand aromatic hydrocarbons. Note: Gloves made of polyvinyl acetate (PVA) are not waterproof and are not for emergency use. If splashing or contact with the eyes is possible, chemical goggles are recommended. Minor Leak: General static electricity protective clothing is usually sufficient. Major Leak: It is recommended to use a full-body chemical corrosion and static electricity protective suit.
Environmental protection measures:	Large spills: Build up a containment dike away from the spilled liquid to facilitate subsequent recovery and treatment. Prevent it from entering waterways, sewers, basements or enclosed areas. Land-based leakage: Eliminate all ignition sources (no smoking, no flames, sparks or open flames in the area). If there is no danger, take action to stop the spill. All equipment used during product handling must be grounded. Do not touch or walk over the spilled product. Avoid flowing into waterways, sewers, basements or narrow areas. Use pressurized foam to reduce vapors. Collect the adsorbed materials with clean tools that do not cause sparks. Cover and move the materials to a container using dry soil, sand or other non-flammable materials. Massive leakage: Spraying water can reduce vapors, but it may not prevent a fire in a confined space. Use a pump or appropriate absorbents for recovery. Water leakage: If there is no danger, take action to stop the spill. Immediately use an oil containment barrier to limit the spill area.

	Warn other vessels. Skim off or use appropriate absorbents to remove. Seek expert advice before using dispersants. Recommendations for handling spill incidents on water or on land are based on the most likely spill scenario of this product; however, geographical conditions, wind, temperature, waves, flow direction and speed (for water spills) can have a significant impact on the appropriate plan to be adopted. Therefore, local experts should be consulted. Note: Local regulations may have requirements or restrictions on the adopted plan.
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SECTION 7: HANDLING AND STORAGE

Handling precautions:	Avoid contact with the skin. Fine metal particles produced during cutting may cause dermatitis. Prevent minor spills and leaks, and avoid the risk of slipping. This product can accumulate static electricity, which may cause electric sparks (ignition source). When this product is handled in bulk, electric sparks can ignite any flammable vapor from the liquid or residue (such as the loading switching operation). Use appropriate connection and/or grounding procedures. However, connection and grounding may not eliminate the disaster of static accumulation. Loading and unloading temperature: [Normal temperature] Transport temperature: [Normal temperature] Transport pressure: [Normal temperature] Static collector: This product accumulates static electricity. If the liquid conductivity is lower than 100 pS/m (100 x 10E-12 Siemens/meter), it is usually considered a non-conductive static gatherer. If the conductivity is lower than 10,000 pS/m, then the liquid is considered non-conductive or semiconductor, and their preventive measures are the same. There are many factors, such as liquid temperature, the appearance of contaminants, anti-static additives and filtration, which can greatly affect the conductivity of the liquid.
Safe storage conditions:	The choice of containers, such as storage containers, may affect the accumulation and dispersion of static electricity. Keep the containers tightly closed. Handle the containers carefully. Open them slowly to control any possible pressure release. Place them in a cool and well-ventilated area. Storage containers should be connected to a ground wire. Fixed storage containers, transportation containers and related equipment must be grounded and bonded to prevent static electricity accumulation. Storage temperature: [Normal temperature] Storage pressure: [Normal temperature] Appropriate containers/packaging: tanker; barrel; barge; railway tank

	car Compatible materials and coatings (chemical compatibility): carbon steel; stainless steel; polyester; Teflon; polyethylene; Polypropylene Incompatible materials and coatings: Butyl rubber; Natural rubber; Ethylene propylene diene monomer rubber; Polystyrene
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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Maximum allowable concentration:	RCP - 8-hour Time-Weighted Average Concentration (TWA) 1200 mg/m ³ (171 ppm Total Hydrocarbon Content)
Control parameter:	The level of protection and the types of control measures required vary depending on the potential exposure conditions. The available control measures include: ensuring adequate ventilation to stay within the exposure limit. Using explosion-proof ventilation equipment.
Personal protective device:	The selection of personal protective equipment varies depending on the possible exposure conditions, such as the application field, the handling work, the concentration and ventilation. The following provides information on the protective equipment for this product, which is formulated based on the recommended use of the product and under normal usage conditions. Respiratory protection: If the engineering control facilities cannot ensure that the concentration of air pollutants is below a certain level that is sufficient to protect the workers' health, it is best to wear an approved respirator. Respirator The selection, use and maintenance of this material must comply with the specified requirements, as applicable. The available types of respirators for this material can include: Half-face filtering respirators using type A filtering materials In environments with high airborne concentration, use an approved self-contained breathing apparatus, operating in a positive pressure mode. Self-contained breathing apparatus with escape bottles is suitable for situations where there is insufficient oxygen, poor gas/vapor warning characteristics, or excessive air filter load. Hand protection: The information provided regarding any specific gloves is based on public literature and data from glove manufacturers. The type of gloves to be used and the duration of use should be selected based on the usage conditions. The type of gloves to be used can be selected and the duration of use can be determined by consulting the glove manufacturer based on the usage conditions. Check and replace worn and damaged gloves. The types of gloves suitable for handling this material include: If there is a possibility of long-term or repeated contact, it is recommended to wear chemical-resistant gloves. If there is a possibility of contact

	with the forearm, then long gloves should be worn. Use nitrile gloves. Eye protection: If contact is possible, it is recommended to use protective glasses with side shields. Skin and body protection: Any specific protective clothing information provided here is based on public literature or manufacturer data. The types of work clothes suitable for the work related to this product include: If there is a possibility of long-term or repeated contact, it is recommended to use work clothes that are resistant to chemicals and oil.
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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless and transparent liquid
Odor:	Odorless or slightly characteristic odor
Relative density (15°C):	0.76 [compared to water] [calculated value]
Density (15°C):	760 kg/m ³ (6.34 lbs/gal, 0.76 kg/dm ³) [ASTM D4052]
Flash point:	61°C (142 F) - 66°C (151 F)
Flammable limit (in air % vol.):	Lower Explosive Limit (LEL): 0.6; Upper Explosive Limit (UEL): 6.0
Flammability (solid, gas):	Not applicable
Self-ignition temperature:	222°C (432° F) [extrapolated, extrapolated value]
Boiling point / range:	185°C (365 F) - 198°C (388 F) [ASTM D86]
Vapor density (air = 1):	5.9 @101 kPa [calculated value]
Steam pressure:	0.05 kPa (0.38 mm Hg) @ 20 C [calculated value]
Evaporation rate (acetic acid n-butyl ester = 1):	0.04 [calculated value]
pH:	Not applicable
Logarithm of the octanol/water partition coefficient:	>4 [Valuation]
Viscosity:	1.26 cSt (1.26 mm ² /sec) at 40°C 1.75 cSt (1.75 mm ² /sec) at 20°C [calculated value]

SECTION 10: STABILITY AND REACTIVITY

Chemical stability:	Stable under recommended storage conditions.
Potential hazardous reactions:	No dangerous reaction known under conditions of normal use.
What to avoid:	Avoid exposure to high temperatures or direct sunlight.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition:	None

SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation toxicity:	Acute toxicity: (in rats) 4-hour LC50 > 5000mg/m3 (vapor). Extremely low toxicity. Based on the test data of similar chemical substances. The test is equivalent to or similar to OECD Standard 403. Stimulation: No specific data. The danger can be ignored under normal temperature/normal handling temperature.
Oral toxicity:	Acute toxicity (in rats): LD50 > 5000 mg/kg. Extremely low toxicity. Based on the test data of similar chemical structures. The test is equivalent to or similar to OECD guideline 401.
Skin toxicity:	Acute toxicity (rabbit): LD50 > 5000 mg/kg. Extremely low toxicity. Based on the test data of similar chemical structures. The test is equivalent to or similar to OECD guideline 402. Skin corrosivity/stimulation: Data available. May cause dryness of the skin and result in discomfort and skin inflammation. Based on the test data of similar chemical structures. The test is equivalent to or similar to OECD guideline 404.
Eye toxicity:	Severe eye injury/stimulation: There is data. It may cause mild and temporary eye discomfort. Based on the test data of similar chemical substances. The test is equivalent to or similar to OECD guideline 405.
Allergic toxicity:	Respiratory sensitization: No specific data available. Not considered a respiratory sensitizing substance. Skin sensitization: Data is available. Not considered a skin sensitizing substance. Based on the test data of materials with similar chemical structures. The test is equivalent to or similar to OECD guideline 406.
Carcinogenicity:	Not considered as mutagenic substances of reproductive cells. Based on the test data of similar chemical structures. The test is equivalent to or similar to the OECD guidelines 471, 473, 474, 476, 478, 479.
Reproductive cell mutagenicity:	Not considered carcinogenic. Based on the test data of substances with similar chemical structures. The test is equivalent to or approximately conforms to OECD guideline 453.
Carcinogenicity:	Not considered carcinogenic. Based on the test data of substances with similar chemical structures. The test is equivalent to or approximately conforms to OECD guideline 453.

Reproductive toxicity:	Not considered to be reproductively toxic. Based on the test data of similar chemical substances. The test is equivalent to or similar to the OECD guidelines 413, 414, 415.
Specific Target Organ Toxicity (STOT):	Single exposure: No specific data available. Do not consider organ damage caused by a single exposure. Repeated exposure: Available data. Do not consider organ damage caused by long-term or repeated exposure. Based on the test data of similar chemical substances. The test is equivalent to or similar to OECD guideline 408 413.
Other information:	If the vapor concentration exceeds the recommended exposure limit, it will irritate the eyes and respiratory tract, potentially causing headaches, dizziness, and being anesthetic. It may also have other effects on the central nervous system. Prolonged and/or repeated contact of the skin with low-viscosity oil products will cause the skin to lose its oils, which may result in irritation or even dermatitis. When this product is ingested or vomited, inhalation of a small amount of the liquid through the lungs may cause chemical pneumonia or lung swelling.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Considered harmless to aquatic life. Chronic toxicity to aquatic organisms is not expected
Persistence and degradability:	Biodegradation: It is considered to be capable of natural biodegradation. Hydrolysis: The changes resulting from hydrolysis are expected to be not very obvious. Photochemical decomposition: The changes resulting from photochemical decomposition are expected to be not very obvious. Air oxidation: It is considered to rapidly degrade in the air.
The potential for biological accumulations:	No data.
Transportation in soil:	Highly volatile and can quickly leach into the air. It is not expected to penetrate into the sediment and solid components of wastewater.

SECTION 13: DISPOSAL CONSIDERATION

Residual Waste:	This product is suitable for use as fuel in a closed and controllable combustion furnace, or for incineration at a very high temperature under supervision to prevent the formation of undesirable combustion products.
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Contaminated Package:	Empty containers may contain residues and may be hazardous. Do not attempt to refill or clean the containers without appropriate guidance. Empty drums should be completely drained and safely stored until they are properly repaired or disposed of. Empty containers should be recycled, repaired or disposed of by a suitable qualified or authorized contractor in accordance with government regulations. Do not apply pressure, cut, weld, hard solder, tin solder, drill, polish or expose these containers to heat sources, open flames, sparks, static electricity, or other fire sources. They may explode and cause injury or death.
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SECTION 14: TRANSPORT INFORMATION

UN Number:	None
Appropriate shipping name of the United Nations:	ADR/RID: Not belong to dangerous goods. IMDG: Not belong to dangerous goods. IATA: Not belong to dangerous goods.
Transportation risk class:	None
Packaging classification:	None
Environment hazard:	None
Special precautionary measures:	None

SECTION 15: REGULATORY INFORMATION

Domestic regulations in China:	The hazard classification of this material is in accordance with the General Rules for Classification and Hazard Communication of Chemicals (GB 13690-2009). Regulatory status and applicable laws and regulations Regulations on the Preparation of Chemical Safety Labels (GB 15258-2009): Subject to regulation The Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution of the Environment: See the section on disposal.
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SECTION 16: OTHER INFORMATION

Other Data:	SDS as a hazard information communication tool should be used to assist in risk assessment. The person in charge of the enterprise may only use this information as a useful supplement to other information received, and shall make an independent and appropriate evaluation of the information content to ensure the appropriate use of the product and to protect the health and safety of its employees. Many factors can be used to determine whether a hazard needs to be reported in the workplace or other placement as a hazard. Risk can be determined by reference to exposure.
Disclaimer:	This safety specification is based on the best information we have about the safety and proper use of this product. However, we cannot guarantee its timeliness or any other express or implied information, and the Company shall not assume any liability for the use of such information. Users should use their own research to determine the best information for a

	particular use. Every user should read this instruction carefully before using the product. For more information to ensure a correct assessment, please contact us.
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