บริษัท โมเดอนเคมีเคิล จำกัด (สำนักงานใหญ่) (MODERN CHEMICAL CO.,LTD. (Head Office))
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SAFETY DATA SHEET

DIISONONYL PHTHALATE

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name:	DIISONONYL PHTHALATE
Recommended use**:**	Chemical for industrial
Manufacturer/Supplier:	**MODERN CHEMICAL CO.,LTD.**
	82/80 Soi Ekamai 22 (Nuannoi), Sukhumvit 63,
	Klong Tan Nuea, Watthana, Bangkok 10110
Telephone No:	0-2715-0897-9, 0-2392-3410-3
Fax No:	0-2715-0908-9, 0-2391-1571-2
Emergency Telephone No:	0-2715-0897-9, 0-2392-3410-3

2. HAZARDS IDENTIFICATION

Label elements:

None.

Hazard statement(s):

None.

Precautionary statement(s):

None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: N/A

Ingredients	% (w/w)	CAS NO.
DIISONONYL PHTHALATE	100	68515-48-0

4. FIRST AID MEASURES

General advice: No data available.

Inhalation: Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

Skin contact: Wash contact areas with soap and water.

Eye contact: Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion: First aid normally not required. Seek medical attention if discomfort occurs.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use water fog, foam, dry chemical or carbon dioxide to extinguish flames.

Unsuitable Extinguishing Media:

Straight streams of water.

Specific hazards arising from Chemicals:

Incomplete combustion products, Oxides of carbon, Smoke, Fume

Special protective equipment for fire-fighters:

Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA).

6. ACCIDENTAL RELEASE MEAS

Precautions: Avoid contact with spilled material. Keep unnecessary and unprotected personnel away. Keep upwind, evacuate downwind. Warn personnel of toxicity and flammability of the substance. Evacuate personnel to safe areas. See Section 5 for fire fighting information. See Section 3 for the Hazard Identification. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expect judgment of the emergency responders.

Environmental precautions: Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

Methods and Material for Containment and Clean Up:

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek advice of a specialist Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note. Local regulations may prescribe or limit action to be taken.

7. HANDLING AND STORAGE

Precautions for Safe Handling & Product Transfer:

Avoid contact with skin. Provide adequate ventilation if fumes or vapour are generated. Prevent small spills and leakage to avoid slip hazard. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or earthing procedures. However, bonding and earthing may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics-Code of practice for the avoidance of hazards due to static electricity).

Conditions for Safe Storage & Unsuitable Materials:

The type of container used to store the material may affect static accumulation and dissipation. Do not store in open or unlabelled containers. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: TWA 5 mg/m^3

Appropriate Engineering Controls: Adequate ventilation should be provided so that exposure limits are not exceeded.

Individual Protection Measures

Respiratory protection: Use appropriate equipment. To maintain the level of substances below the level prescribed. For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: For prolonged contact with the substance or contact frequently. Wear protective gloves. And if there is a chance of contact with the substance in the arm. Wear gloves that cover the arms of use Neoprene, Nitrile.

Eye protection: If contact is likely, safety glasses with side shields are recommended.

Skin and body protections: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: For prolonged contact with the substance or contact frequently. Chemical and oil resistant apron protective clothing.

Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor : liquid, Colorless, Odourless	**Evaporation rate :** N/D
Melting Point : N/A	**Specific gravity :** 0.968-0.979 g/cm^3 at 20 °C
pH : N/D	**Solubility in water :** Negligible
Boiling point : >300 °C	**Viscosity:** 88 - 108 cSt. at 20 °C
Vapour pressure : <0.01 mmHg at 20 °C	**Vapour density (air=1) :** >1 at 101kPa
Lower explosive limits : 0.3 %Vol	**Upper explosive limits :** 1.7 %Vol
Auto-ignition temperature : >400°C	**Flash point:** >200 °C
Odour threshold: N/D	**Flammability (solid, gas):** N/A
Decomposition temperature: N/D	**Solubility in other solvents:** N/A
n-octanol/water partition coefficient (log P_{ow}): 8.8	

10. STABILITY AND REACTIVITY

Chemical Stability: Material is stable under normal conditions.

Reactions: No data available.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to avoid: Excessive heat. High energy sources of ignition.

Materials to avoid: Strong oxidizers.

Hazardous decomposition products: Material does not decompose at ambient temperatures.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD50 (Oral, rat): >10000 mg/kg

LD50 (Skin, rabbit): >3160 mg/kg

LC50 (Inhalation, rat): >4.4 mg/l

Sensitization: Eyes : May cause mild, short-lasting discomfort to eyes.

Skin : Negligible irritation to skin if long exposure.

Chronic toxicity: Anticipated health effects from sub-chronic, chronic, respiratory or skin sensitization, mutagenicity, reproductive toxicity, carcinogenicity, target organ toxicity (single exposure or repeated exposure), aspiration toxicity and other effects based on human experience and/or experimental data.

Further toxicological information: No data available

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish:	LC0 - Onchorhynchus mykiss: 0.16 mg/l -96h
Toxicity to daphnia and other aquatic invertebrates:	
	EC0 - Daphnia magna: 0.06 mg/l -48h
Toxicity to algae:	EC0 - Pseudokirchneriella subcapitata: 1.8 mg/l -5d
Toxicity to bacteria:	No data available
Biodegradability Remarks:	Expected to be readily biodegradable 70.5% - 28d.
Bioaccumulative Potential:	Potential to bioaccumulate is low. 14 d (BCF<3 in wter).
Mobility:	Expected to partition to sediment and wastewater solids. Minimally volatile.
Affected in any other way:	No data available.

13. DISPOSAL CONSIDERATIONS

Material Disposal: Suitable routes of disposal are supervised incineration, preferentially with energy recovery, or appropriate recycling methods in accordance with applicable regulation and material characteristics at the time of disposal.

Container Disposal: Empty Container warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death.

14. TRANSPORT INFORMATION

ADR/ADNR

Not Regulated for Land Transport

IMGD

Not Regulated for Sea Transport according to IMDG-Code

Marine pollutant : No

MARPOL 73/78 Convention-Annex II

Product Name: DIALKYL (C9-C10) PHTHALATES

Ship type: 2

Pollution category: Y

IATA

Not Regulated for Air Transport

15. REGULATORY INFORMATION

This material is considered hazardous according to the classification criteria of the Hazard Classification and Communication System for Hazardous Material BE 2555.

REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Hazardous Substance Act BE2535: Not Regulated

Listed or exempt from listing / notification on the following chemical inventories (May contain substance(s) subject to notification to the EPA Active TSCA inventory prior to import to USA): AICS, DSL, ENCS, IECSC, KECI, PICCS, TCSI, TSCA

Additional information:

Restrictions exist that limit use of this product in children's toys or childcare articles that can be placed in the mouth; check relevant regulations.

16. Other Information

Modern Chemical Co.,Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensive or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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