



SAFETY DATA SHEET

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

Product name: N-(2-Ethylhexyl)-5-norbornene-2,3-dicarboximide
Product code: O0167
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Revision number: 1

2. HAZARDS IDENTIFICATION

Classification of the GHS

PHYSICAL HAZARDS	Not classified
HEALTH HAZARDS	
Acute toxicity (Oral)	Category 5
Acute toxicity (Dermal)	Category 3
ENVIRONMENTAL HAZARDS	
Acute aquatic toxicity	Category 2

GHS label elements

Pictograms or hazard symbols



Signal word	Danger
Hazard statement	May be harmful if swallowed Toxic in contact with skin Toxic to aquatic life

Precautionary statements

[Prevention]	Avoid release to the environment. Wear protective gloves and eye/face protection.
[Response]	IF ON SKIN: Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Call a POISON CENTER or doctor/physician if you feel unwell.
[Storage]	Store locked up.
[Disposal]	Dispose of contents/container through a waste management company authorized by the local government

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance
Component(s): N-(2-Ethylhexyl)-5-norbornene-2,3-dicarboximide
Percent: >98.0%(T)
CAS Number: 113-48-4
Synonyms: N-(2-Ethylhexyl)bicyclo[2.2.1]hept-5-ene-2,3-dicarboximide , N-Octylbicyclo[2.2.1]hept-5-ene-2,3-dicarboximide , N-Octyl-5-norbornene-2,3-dicarboximide
Chemical Formula: C₁₇H₂₅NO₂

4. FIRST AID MEASURES

- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- Skin contact:** Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Call a POISON CENTER or doctor/physician.
- Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Ingestion:** Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
- Protection of first-aiders:** A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media:** Dry chemical, foam, water spray, carbon dioxide.
- Extinguishing media not to be used:** Solid streams of water
- Specific hazards:** Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
- Specific methods:** Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.
- Special protective equipment for firefighters:** When extinguishing fire, be sure to wear personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures:** Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
- Environmental precautions:** Prevent product from entering drains.
- Methods and materials for containment and cleaning up:** Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Handling

- Technical measures:** Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapor or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapor or aerosol will be generated.
- Advice on safe handling:** Avoid contact with skin, eyes and clothing.

Storage

- Storage conditions:** Keep container tightly closed. Store in a cool and dark place. Store locked up. Store away from incompatible materials such as oxidizing agents.
- Packaging material:** Law is followed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Engineering controls:** Install a closed system or local exhaust. Also install safety shower and eye bath.
- Personal protective equipment**
- Respiratory protection:** Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
- Hand protection:** Impervious gloves.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Eye protection:** Safety goggles. A face-shield, if the situation requires.
Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state (20°C):** Liquid
Form: clear
Color: Slightly pale yellow - Yellow
Odor: No data available
pH: No data available
Melting point/freezing point: No data available
Boiling Point/Range: 158 °C/0.3kPa
Flash Point: 177°C
Explosive limits
Lower: No data available
Upper: No data available
Density: 1.05
Solubility: Miscible with : Many organic solvents
Insoluble in: Water
log Pow = 3.62

10. STABILITY AND REACTIVITY

- Stability:** Stable under proper conditions.
Reactivity: No special reactivity has been reported.
Incompatible materials: oxidizing agents
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

- Acute Toxicity:** ori-rat LD50:2800 mg/kg
skn-rat LD50:470 mg/kg
Skin corrosion/irritation: No data available
Serious eye damage/irritation: No data available
Germ cell mutagenicity: No data available
Carcinogenicity:
IARC = No data available
NTP = No data available
Reproductive toxicity: No data available
RTECS Number: RB8575000

12. ECOLOGICAL INFORMATION

- Ecotoxicity:**
Fish: 96h LC50:2.0 mg/L (Oryzias latipes)
Crustacea: 48h EC50:3.6 mg/L (Daphnia magna)
Algae: No data available
Persistence / degradability: No data available
Bioaccumulative potential(BCF): 330
Mobility in soil
log Pow: 3.62
Soil adsorption (Koc): 2200
Henry's Law constant(PaM³/mol): 2.89 x 10⁻²

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

Hazards Class: 6.1: Toxic substance.
UN-No: 2810
Proper shipping name: Toxic liquid, organic, n.o.s.
Packing group: III

15. REGULATORY INFORMATION

Safe management ordinance of dangerous chemical product (State Council announces on January 26, 2002): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

16. OTHER INFORMATION

The reference company name of written contents

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