

Designer Molecules, Inc.

Safety Data Sheet

Product: ILR-1401
MSDS ID: R1401

Revised Date: 04/24/23
Replaces Date: 08/31/22

1. Product and Company Identification

Product Code: R1401
Trade Name(s): ILR-1401
Product Type: Imide Linked Benzoxazine Oligomer in Anisole (10 – 20 wt. % resin)
Recommended Use: Thermoset resin additive
Restrictions: None identified

Company: Designer Molecules, Inc.
10080 Willow Creek Rd.
San Diego, CA 92131
Telephone: 858-348-1122

Emergency phone number (spill, leak, fire, exposure or accident):
US Domestic (800) 535-5053 (INFOTRAC) Includes Canada and Mexico
International +1 (352) 323-3500
China Specific (86) 400-120-0761
Germany Specific (49) 0800-181-2924
Australia Specific (61) 1-300-366-961

2. Hazards Identification

EMERGENCY OVERVIEW:

GHS Classification:

Flammable liquid	Category 3
Acute aquatic toxicity	Category 2
Skin Corrosion /Irritation	Category 2
Serious Eye Damage /Eye Irritation	Category 2B
Respiratory or Skin Sensitization	Category 1

PICTOGRAM



SIGNAL WORD

Danger

HAZARD STATEMENT(S)

H226	Flammable liquid and vapor.
H317	May cause an allergic skin reaction
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H401	Toxic to aquatic life.

PRECAUTIONARY STATEMENT(S)

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.

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- P241 Use explosion-proof electrical/ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge
P280 Wear protective gloves/ eye protection/ face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P235 Store in well ventilated place. Keep cool.
P501 Dispose of content/ containers to an approved waste disposal plant.

3. Composition Information

SUBSTANCE / MIXTURE
GENERIC NAME

MIXTURE
Imide Linked resin solution

INGREDIENT	Polyimide oligomer	Anisole
RATIO	10 - 20 wt%	80 - 90 wt%
CAS REGISTRY No.	Not assigned	100-66-3

4. First Aid Measures

GENERAL ADVICE:

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

INHALATION

Remove the victim to fresh air. If not breathing, give artificial respiration. Consult a physician.

SKIN CONTACT

Remove all contaminated clothing, shoes and socks from the affected areas as quickly as possible. Wash the affected area under tepid running water using a mild soap.

EYE CONTACT

Gently rinse the affected eyes with clean water for at least 15 minutes. Arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

INGESTION

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. Fire and Explosion Hazard Data

SPECIFIC HAZARDS WITH REGARD TO FIRE-EXTINGUISHING MEASURES

Shut off the supply. Use extinguishing equipment from the up-wind side. If necessary wear protective clothing including a breathing apparatus.

If the fire extends to the surrounding, cool the facilities by splaying with water. Immediately move containers to safe place if possible.

EXTINGUISHING MEDIA

In case of fire use dry sand, alcohol-resistant foam, dry chemical powder, carbon dioxide, foam

6. Accidental Release Measures

CAUTIONS FOR PERSONNEL

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Wear proper equipment and avoid contact with skin and inhalation of vapor. Keep personnel away from downwind of any fire. Shut off all sources of ignition.

CAUTIONS FOR ENVIRONMENT

Prevent spills from entering waterways.

REMOVAL MEASURE

Shut off the leakage source to stop the leakage. For small spill, absorb spill with absorbent and collect in chemical waste container. For large spill, prevent contamination of surrounding area and move material to a safe place for collection.

PREVENTION OF SECOND ACCIDENT

Remove nearby sources of ignition and prepare extinguishing media.

7. Handling and Storage

HANDLING

Engineering measures

Wear proper protective equipment to prevent contact with skin or inhalation of the vapor. Pay attention to fire

Cautions for safety handling

Use with an enclosed system or a local exhaust ventilation.

STORAGE

Adequate storage condition

Store at room temperature, keep package tightly closed. Avoid direct rays from the sun. No fire.

Safety adequate container materials

Glass, plastic

8. Exposure Controls and Personal Protection Measures

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL LIMITS

Contains no substances with occupational exposure limit values.

ENGINEERING MEASURES

Use only with adequate ventilation and in closed systems.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION

If necessary, wear chemical cartridge respirator with an organic vapor cartage.

EYE PROTECTION

Safety goggles

HAND PROTECTION

Organic solvents resistant gloves

SKIN AND BODY PROTECTION

Protective clothing, protective boots

9. Physical / Chemical Characteristics

APPEARLANCE, PHYSICAL STATE, COLOR, ODOR

Liquid, clear, amber, sweet odor

SPECIFIC TEMPERATURE or TEMPERATURE OF PHYSICAL CONDITIONS CHANGE

Boiling point 154°C <Anisole>

Melting point -37°C <Anisole>

FLASH POINT 51.7°C <Anisole>

EXPLISION LIMIT No data available

VAPOR PRESSURE 4.679 hPa (20°C) <Anisole>

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VAPOR DENSITY 3.73 <Anisole>
SPECIFIC GRAVITY 0.995 g/ml (20°C) <Anisole>
SOLUBILITY Water ; 1.71 g/l <Anisole>

10. Reactivity Hazard Data

STABILITY May polymerize on high temperature condition
REACTIVITY Strong bases, strong acids, strong oxidizers, or radical initiator
INCOMPATIBILITY Strong bases, strong acids, strong oxidizers, or radical initiator
HAZARDOUS DECOMPOSITION PRODUCTS
Carbon monoxide

11. Toxicological Information

Acute Toxicity (Oral) LD50 Oral – Rat – 3,700 mg/kg <Anisole>
Acute Toxicity (Dermal) Not Classified
Acute Toxicity (Gases) Not Applicable
Acute Toxicity (Vapors) Not Classified
Acute Toxicity (Dusts and Mists) Not Classified
Skin Corrosion /Irritation (Category 2) Causes skin irritation. The mixture contains $\geq 3\%$ of an ingredient which is irritant (category 2) and for which additivity may not apply.
Serious Eye Damage /Eye Irritation Not Classified
Respiratory or Skin Sensitization (Category 1) May Cause an allergic skin reaction. The mixture contains one or more ingredients classified as a skin sensitizer at $\geq 1\%$.
Germ Cell Mutagenicity Not Classified
Carcinogenicity Not Classified
Reproductive Toxicity Not Classified
Specific Target Organ Toxicity (Single Exposure) Not Classified
Specific Target Organ Toxicity (Repeated Exposure) Not Classified
Aspiration Hazard Not Classified

12. Ecological Information

Hazardous to the Aquatic Environment (Acute) Category 2.
Hazardous to the Aquatic Environment (Chronic) Not Classified

13. Disposal Considerations

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Follow all regulations in your country.

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14. Transport Information

DOT (US):

UN-Number: 1993 Class:3 Packing group: III
Proper shipping name: Flammable liquid, n.o.s. (Anisole)
Reportable Quantity (RQ):
Marine pollutant: No
Poison Inhalation Hazard: No

IATA:

UN number: 1993 Class: 3 Packing group: III
Proper shipping name: Flammable liquid, n.o.s. (Anisole)

15. Regulatory Information

TSCA Status:

One component is not listed on the TSCA inventory. For use by trained professionals for R&D only.

SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards:

Acute health hazard

CALIFORNIA PROPOSITION 65:

This product does not contain any chemicals that are known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other Information

The opinions expressed herein are those of qualified experts within Designer Molecules Inc. We believe that the information contained herein is current, as of the date of this MSDS. Because the use of this information and of these opinions, and the conditions of use of this product, are not within the control of Designer Molecules Inc., it is the user's legal obligation to determine the conditions of safe use of this product.