GHS Safety Data Sheet

SDS No.: IRR01LAEG

Date Issued: 2004/02/25 Last updated: 2017/08/02

Section 1. Identification of the substance or mixture and of the supplier

1.1 Product Information

 $Product name: Ir(C_5H_4C_2H_5)(C_8H_{12}) \quad (Ethylcyclopentadienyl)(1,5-cyclooctadiene) Iridium$

Product number	Purity	Form
IRR01LB	_	liquid

1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd.

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Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Skin corrosion/ irritation: Category 2 Serious eye damage/eye irritation : Category 2 Specific target organ toxicity, single exposure: Category 3	No data available	Substances and mixtures which, in contact with water, emit flammable gases : Not classified
GHS Label : W	•	



Pictograms or symbols

Warning word: WARNING	
Hazard information	Description of precaution
Causes skin irritation	Wear protective gloves/protective clothing/eye protection /respiratory protection/face protection during handling.
Causes serious eye irritation. May cause respiratory irritation	Avoid breathing dust/mist/gas/fume/vapours/spray. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling.
	Take off the contaminated clothing and wash before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN; Remove immediately all contaminated clothing and rinse
	skin with water/shower. Then wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention.
	Call a POISON CENTER or doctor/physician if you feel unwell. Protect from sunlight. Store in a cool, dry and well ventilated place. Keep container tightly closed. Store locked up.
	Dispose of contents/ container in accordance with local/national regulations.

Additional hazard information : With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients

$(Ethyl cyclopenta dienyl) (1, 5\-cycloocta diene) Iridium$
Ir(C ₅ H ₄ C ₂ H ₅)(C ₈ H ₁₂)
Single substance
100%
246516-14-3
not registered
not listed
not listed

Section 4. First aid measures

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids.	
	Continue to rinse for at least 15 minutes and get medical attention.	
Skin contact:	Promptly flush contaminated skin with soap or mild detergent and water.	
	Contact physician if irritation continues.	
Inhalation:	Remove the exposed person immediately and provide fresh air.	
	Get medical attention.	
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.	

Section 5. Fire fighting measures

Extinguishing	Carbon dioxide, Dry chemical powder, Dry sand.	
agents:	DO NOT use a direct water stream.	
Fire fighting:	Combustible material. Burning material releases toxic organic fumes.	
	Remove containers to safe place if possible.	
	Use water spray to Cool down nearby structures and containers.	
Self-contained breathing apparatus and full protective clothing should be used		
	if the material is involved in fire.	
	Heating may cause an explosion.	

Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor/dusts.
Environmental	Shut off leak if without risk.
hazard precautions:	Prevent flow out to river, etc. so as not to badly affect.
Method for	Remove all sources of ignition.
containment and	Avoid unnecessary contacts with spills.
cleaning up:	Indoor leakage: Ventilate as much as possible until the cleaning is completed.
	Outdoor leakage: Work from the windward and evacuate the leeward crowd.
	Absorb or cover with vermiculite or other suitable absorbent, and dispose of
	DOT-approved waste containers as much as possible.
	Carefully wash spill site with plenty of water after material pick up.

Section 7. Han	dling and storage
Precautions to be take	en in handling:
Safe handling:	Keep container or bottle tightly closed when not in use.
	Handling worker wears suitable protective clothing.
	Under inevitable exposure cases, handle the material using ventilation.
	Electrically ground all equipment when handling this material and use
	only non-sparking tools.
Precautions to be take	en in storage:
General precautions:	Store the material in a sealed container.
	Store in a cool, dry, well ventilated and dark place away from
	incompatible materials.
Section 8. Exp	osure controls / personal protection
Exposure guideline:	ACGIH(2013)TLV :No data available
	OSHA(2006)PEL : No data available
Facility measures:	Local ventilation of closed work room or total proper ventilation to prevent
	inhalation.
Protective ware:	Wear appropriate NIOSH/MSHA-approved respirator, safety goggles,
	impervious gloves, protective wear, protective boots.

Section 9. Physical and chemical properties

Color and Form:	Yellow liquid
Chemical formula:	Ir(C5H4C2H5)(C8H12)
Formula weight:	393.6
Melting point:	14 °C
Boiling point:	105 °C/13.3 Pa
Density:	1.82 g/cm ³
Solubility:	Water: Insoluble
	Miscible with: Tetrahydrofuran, toluene, heptane and octane
Flash point:	No data available
Oxidation:	None

Section10. Stability and reactivity

Stability:	• Stable in air under room temperature.
Reactivity	
Incompatibility:	Oxidizing agents
Hazard decomposition	Carbon monoxide, carbon dioxide, metallic oxide of iridium
products	and toxic fumes.

Section11. Toxicological information

Acute toxicity:	GHS; No data available
Skin corrosive / irritation:	GHS: Category 2; Causes skin irritation

Serious eye damage / irritation:	GHS : Category 2 ; Causes serious eye irritation
Respiratory/ skin sensitization:	GHS ; No data available
Germ cell mutagenicity:	GHS ; No data available
Carcinogenicity:	GHS ; No data available
Reproductive toxicity:	GHS ; No data available
Specific target organ toxicity	
-single exposure:	GHS; Category 3; May cause respiratory irritation
Specific target organ toxicity	
-repeated exposure:	GHS; No data available

Section12. Ecological information

Ecotoxicity:

Hazardous to the aquatic environment

	-acute toxicity:	GHS ; No data available
	-chronic toxicity:	GHS ; No data available
Hazardous to the ozone layer		GHS; No data available
		No Freon or Halon
Fish toxicity:		No data available
Degradability:		No data available
Bioaccumulative potential:		No data available
Mobility in soil:		No data available

Section13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

Section 14. Transport information

UN classification:	Not regulated
UN number:	None
HS code:	2841.90
Marine pollution:	None
Precautions:	Container should be transported in a secure position, in a well-ventilated
	vehicle.

Section 15. Regulatory information

 $\operatorname{TSCA}\operatorname{inventory}\operatorname{:}\operatorname{not}\operatorname{listed}$

Please refer to any other local / national measures that may be relevant.

Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.