

Indium Acetylacetonate		Pricing >
Linear Formula	$\text{In}(\text{C}_5\text{H}_7\text{O}_2)_3$	
Pubchem CID	16687813	
MDL Number	MFCD00013494	
EC No.	238-378-6	
IUPAC Name	(z)-4-bis[(z)-1-methyl-3-oxobut-1-en-1-yl]indiganyloxypent-3-en-2-one	
SMILES	[In+3].O=C(/C=C/[O-])C.[O-]C(=C/C(=O)C)C.[O-]C(=C/C(=O)C)C	
InchI Identifier	InChI=1S/3C5H8O2.In/c3*1-4(6)3-5(2)7;/h3*3,6H,1-2H3/q;+3/p-3/b3*4-3-;	
InchI Key	SKWCWFYBFZIXHE-LNTINUHCSA-K	
Signal Word	Warning	
Hazard Statements	H302-H312-H315-H319-H332-H335-H351	
Hazard Codes	Xn	
Risk Codes	20/21/22-36/37/38-40	
Safety Statements	26-36	
RTECS Number	NL2025000	
Transport Information	N/A	
WGK Germany	3	

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SAFETY DATA SHEET

Date Accessed: 04/29/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #14405-45-9

Relevant identified uses of the substance:
Scientific research and development

Supplier details:
American Elements

10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351

Emergency telephone number:
Domestic, North America +1 800-424-9300
International +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Acute Toxicity -
Oral [Category 4]
Acute Toxicity - Dermal [Category 4]
Acute Toxicity - Inhalation [Category 4]
Sensitization - Skin [Category 1]
Specific Target Organ Toxicity (Single Exposure)
[Category 3]
Signal word: Warning!
Hazard Statement(s): Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled
May cause an allergic skin reaction
May cause respiratory irritation.



Pictogram(s) or Symbol(s):
Precautionary Statement(s):
[Prevention] Do not eat, drink or smoke when using
this product. Wash hands and face thoroughly after
handling. Wear
protective gloves and protective clothing. Avoid
breathing dusts or mists. Use only outdoors or in a
wellventilated
area. Contaminated work clothing must not be
allowed out of the workplace. Wear protective
gloves.
[Response] If swallowed: Immediately call a poison
center or doctor. Rinse mouth. If on skin: Wash with
plenty of
water. Call a poison center or doctor if you feel unwell.
Take off contaminated clothing and wash it before
reuse. If inhaled: Remove person to fresh air and
keep comfortable for breathing. If skin irritation
occurs:
Get medical advice/attention. Wash contaminated
clothing before reuse.
[Storage] Store in a well-ventilated place. Keep
container tightly closed. Store locked up.
[Disposal] Dispose of contents and container in
accordance with US EPA guidelines for the

classification and
determination of hazardous waste listed in 40 CFR
261.3. (See Section 13)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Substance
Components: Tris(2,4-pentanedionato)indium(III)
Percent: >99.0%(T)
CAS Number: 14405-45-9
Molecular Weight: 412.15
Chemical Formula: C₁₅H₂₁InO₆
Synonyms: Acetylacetone Indium(III) Salt , Indium(III)
Acetylacetonate

SECTION 4. FIRST AID MEASURES

Inhalation: May cause coughing, difficult breathing
and nausea. Call a poison center or doctor if you feel
unwell.

Effects of exposure (inhalation) to substance may be
delayed. Inhalation of vapors or contact with
substance will result in contamination and potential
harmful effects. Move victim to fresh air. Give artificial
respiration if victim is not breathing. Administer
oxygen if breathing is difficult. Keep victim warm and
quiet.

Treat symptomatically and supportively. Ensure that
medical personnel are aware of the material(s)
involved and take precautions to protect themselves.

Skin contact: Call a poison center or doctor if you feel
unwell. Effects of exposure (skin contact) to
substance may be

delayed. Remove and wash contaminated clothing
before re-use. Remove and isolate contaminated
clothing and shoes. In case of contact with substance,
immediately flush skin with running water for at
least 20 minutes. Treat symptomatically and
supportively. Ensure that medical personnel are
aware of the

material(s) involved and take precautions to protect
themselves.

Eye contact: If this chemical contacts the eyes,
immediately wash (irrigate) the eyes with large
amounts of water,
occasionally lifting the lower and upper eyelids. If eye
irritation persists get medical advice/attention. Move
victim to fresh air. Check for and remove any contact
lenses. Keep victim warm and quiet. Treat
symptomatically and supportively. Effects of exposure

to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Ingestion: Harmful if swallowed. Effects of exposure (ingestion) to substance may be delayed. Call a physician or

Poison Control Center immediately. Do not use mouth-to-mouth method if victim ingested the substance;

give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware

of the material(s) involved and take precautions to protect themselves.

Symptoms/effects:

Acute: No data available

Delayed: May cause skin sensitization. May have effects on the respiratory tract.

Immediate medical attention: WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is harmful. CAUTION: Victim may be a source of contamination. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Dry chemical, CO₂, water spray, or alcohol-resistant foam. Consult with local fire authorities before

attempting large scale fire fighting operations.

Specific hazards arising from the chemical

Hazardous combustion products: These products include: Carbon oxides

Other specific hazards: Closed containers may explode from heat of a fire.

Special precautions for fire-fighters:

Use water spray or fog; do not use straight streams.

Dike fire-control water for later disposal; do not scatter the material. Containers may explode when heated. Move containers from fire area if you can do it without risk.

Special protective equipment for fire-fighters:

Wear positive pressure self-contained breathing

apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch

damaged containers or spilled material unless wearing appropriate protective clothing (Section 8).

Warn

unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation.

Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Personal protective equipment: Splash goggles. Wear protective clothing (chemical resistant suit and chemical resistant boots). Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).

Emergency procedures: Prevent dust cloud. Do not clean-up or dispose except under supervision of a specialist. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and exercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material.

Environmental precautions:

Keep away from living quarters. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Avoid inhalation of vapor or mist. Do not ingest. Avoid contact with skin and eyes. Avoid contact with skin.

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke.

Keep

away from sources of ignition.

Conditions for safe storage: Store locked up. Keep containers tightly closed in a cool, well-ventilated place. Keep away from

incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods.

Storage incompatibilities: Store away from oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

OSHA PEL (TWA): 0.1 mg (ln)/m³

Appropriate engineering controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment

Respiratory protection: Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Hand protection: Nitrile gloves.

Eye protection: Safety glasses.

Skin and body protection: Lab coat.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: Crystal - Powder

Color: White - Slightly pale yellow

Odor: No data available

Odor threshold: No data available

Melting point/freezing point: 186°C (367°F)

Boiling point/range: No data available

Decomposition temperature: No data available

Relative density: No data available

Kinematic Viscosity: No data available

Partition coefficient: No data available

n-octanol/water (log Pow)

Flash point: 180°C (356°F)

Flammability (solid, gas): No data available

pH: No data available

Vapor pressure: No data available

Vapor density: No data available

Dynamic Viscosity: No data available

Evaporation rate: No data available

(Butyl Acetate = 1)

Autoignition temperature: No data available

Flammability or explosive limits: No data available

Lower: No data available

Upper: No data available

Solubility(ies):

Water: Insoluble

Soluble: Methanol, Benzene, Acetone, Chloroform,
Toluene

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not Available.

Chemical Stability: Stable under recommended storage conditions. (See Section 7)

Possibility of Hazardous Reactions: No hazardous reactivity has been reported.

Conditions to avoid: Avoid excessive heat and light.

Incompatible materials: Strong oxidizing agents

Hazardous Decomposition Products: No data available

SECTION 11. TOXICOLOGICAL INFORMATION

RTECS Number: NL2025000

Acute Toxicity:

ivn-mus LD50:79 mg/kg

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:
No data available
Carcinogenicity:
No data available
IARC: No data available NTP: No data available
OSHA: No data available
Reproductive toxicity:
No data available
Routes of Exposure: Inhalation, Eye contact,
Ingestion, Skin contact.
Symptoms related to exposure:
Overexposure may result in serious illness or death.
Skin contact may result in sensitization. Readily
absorbed through skin. Inhalation causes irritation
of the lungs and respiratory system.
Potential Health Effects:
Inhalation causes irritation of the lungs and respiratory
system.
Target organ(s):
May cause respiratory irritation.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
Fish: No data available
Crustacea: No data available
Algae: No data available
Persistence and degradability: No data available
Bioaccumulative potential (BCF): No data available
Mobility in soil: No data available
Partition coefficient:
n-octanol/water (log Pow)
No data available
Soil adsorption (Koc): No data available
Henry's Law:
constant (PaM³/mol)
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of product: Recycle to process if possible. It
is the generator's responsibility to comply with
Federal, State and Local
rules and regulations. You may be able to dissolve or
mix material with a combustible solvent and burn in a
chemical incinerator equipped with an afterburner and
scrubber system. This section is intended to provide
assistance but does not replace these laws, nor does
compliance in accordance with this section ensure
regulatory compliance according to the law. US EPA

guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.
Disposal of container: Dispose of as unused product.
Do not re-use empty containers.
Other considerations: Observe all federal, state and local regulations when disposing of the substance.

SECTION 14. TRANSPORT INFORMATION

DOT (US) Non-hazardous for transportation.
IATA Non-hazardous for transportation.
IMDG Non-hazardous for transportation.

SECTION 15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):
This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.
US Federal Regulations
CERCLA Hazardous substance and Reportable Quantity:
SARA 313: Not Listed
SARA 302: Not Listed
State Regulations
State Right-to-Know
Massachusetts Not Listed
New Jersey Not Listed
Pennsylvania Not Listed
California Proposition 65: Not Listed
Other Information
NFPA Rating:
Health: 2
Flammability: 1
Instability: 0
HMIS Classification:
Health: 2
Flammability: 1
Physical: 0
International Inventories
WHMIS hazard class: D2A: Materials causing other toxic effects. (Very Toxic)
D2B: Materials causing other toxic effects. (Toxic)
Canada: NDSL On NDSL
EC-No: 238-378-6

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.
