



THE INDIUM CORPORATION OF AMERICA®\EUROPE®\ASIA-PACIFIC®
INDIUM CORPORATION (SUZHOU)®

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 **Product Identifier:**

HSMF

SDS Number: SDS- 6026

Revised Date: 22 APRIL 2015

1.2 **Relevant identified uses of the substance or mixture and uses advised against**

Product Use: INDUSTRIAL USE – METAL CONSISTING OF ALUMINUM WITH COATING COMPOUND

1.3 **Details of the supplier of the safety data sheet**

MANUFACTURER/SUPPLIER/IMPORTER:

In America:

The Indium Corporation of America
1676 Lincoln Ave., Utica NY 13502
Technical & Safety Information: (315) 853-4900
Safety & SDS Information: nswarts@indium.com
Corporation web page: <http://www.indium.com>

In Europe:

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Kingston, Milton Keynes, UK, MK 10 OAG
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In China:

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Suzhou Industrial Park
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Information: (86) 512-6283-4900

In Asia:

Indium Corporation of America
 Asia-Pacific Operations-Singapore
 29 Kian Teck Avenue
 Singapore 628908
 Information: +65 6268-8678

1.4 EMERGENCY TELEPHONE NUMBER

FOR CHEMICAL EMERGENCY ONLY PHONE *:

CHEMTREC 24 hrs.

USA: 1 (800) 424-9300

Outside USA: +1 (703) 527-3887

*** Used only for spill/leak/fire/exposure/accident**

ALL OTHER INQUIRIES: TOLL FREE: +1-800-448-9240 Indium Corporation

SECTION 2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

Eye Inhalation Skin Ingestion NTP IARC OSHA Not Listed

Carcinogen listed in

2.1 Classification of the mixture:

Risk Phrases: R36/37/38

2.2 Label elements

Labeling according to Regulation (EC) No. 1272/2008



Signal Word: Warning

Hazard statement(s)

H315 Causes skin irritation

Precautionary statement(s)

- P233 Keep container tightly closed
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P270 Do not eat, drink or smoke when using this product
- P273 Avoid release to the environment
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P362 Take off contaminated clothing and wash before reuse

P301 + P314 IF SWALLOWED: Get Medical advice/attention if you feel unwell
 P302 +P352 IF ON SKIN: Wash with plenty of soap and water
 P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
 P305 + P351 IF IN EYES: Rinse continuously with water for several minutes (15 mins)

Classification:

Skin irritation- Category 2

Does not contain any PBT/

2.3 OTHER HAZARDS:

POTENTIAL HEALTH EFFECTS:

Eye Contact: Contact with metal alloy fume from molten metal may cause irritation. Severe eye damage may result from hot molten metal being splashed into the eyes. Wear safety glasses and face shield when working with molten metal.

Ingestion: May cause irritation.

Inhalation: Inhalation of fume may cause local irritation to the respiratory system.

Skin Contact: Normal handling should not cause any adverse health effects. Hot molten metal may cause burns to the skin. Wear protective equipment when handling molten metal.

Chronic: Not established

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SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixture:

Components	% wt	CAS Registry #/ EINECS#
ALUMINUM FOIL	25 – 50	7429-90-5/231-072-3
PROPRIETARY COATING COMPOUND THERMAL GREASE MIXTURE	50 - 75	1314-13-2

<http://www.indium.com>

SECTION 4. FIRST AID MEASURES**4.1 Description of first aid measures:**

- Eye Contact:** Hold eyelids apart and flush eyes with plenty of tepid water for at least 15 minutes. Seek medical attention if irritation persists.
- Ingestion:** If patient is conscious, ONLY induce vomiting as directed by trained personnel. NEVER give anything by mouth to an unconscious person. Seek medical attention immediately.
- Inhalation:** Remove to fresh air. If not breathing, give artificial respiration or oxygen by trained personnel. Seek immediate medical attention.
- Skin Contact:** Remove contaminated clothing. Wash affected area with soap and water. Wash clothing before reuse. If irritation persists, obtain medical attention.

4.2 Most important symptoms and effect, both acute and delayed:

Skin contact can cause irritation.
Inhalation may cause irritation.
Eye exposure may cause irritation.

4.3 Indication of any immediate medical attention and special treatment needed:

No specific special treatment information is available on this mixture. Review data provided in this document to understand the hazards when working with the product. No other information is available at this time.
Seek medical attention if eye irritation continues after flushing.
If respiratory discomfort is evident seek medical advice.

SECTION 5. FIRE FIGHTING MEASURES

- 5.1 Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions. Water, CO₂, foam media.
- 5.2 Special hazards arising from the substance or mixture:**
May produce toxic fumes of carbon monoxide if burning .
- 5.3 Advice for Firefighters** Fire fighters must wear approved self-contained breathing apparatus and full protective clothing.

Material product is not flammable. No other information is available.

SECTION 6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Keep away from the spill. Remove sources of ignition. Keep exhaust ventilation system running. In the event of a fire evacuate area. If molten, cool to allow metal to solidify. If a solid metal, wear gloves, pick up and return to process. If dust, wear recommended personal protective equipment. Do not sweep dust. Use a vacuum, place in barrels and return to process if applicable.

For emergency responders:

Wear safety glasses, gloves when cleaning up any spill. Other equipment may be necessary based on the immediate area and other chemicals unrelated to the product that may be in use. Adequate ventilation should be available. Keep unnecessary personnel away from area during clean up.

6.2 Environmental Precautions: Dispose contaminated clean up materials following all applicable governmental regulations. May not have any reclaim value. Contains a substance that is harmful to the aquatic environment.

6.3 Methods and material for containment and cleaning up:
 Spill or leak procedures: Clean up solids for possible reclaim.

6.4 Reference to other sections: See Section 8 for exposure levels.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions Keep containers tightly closed when not in use. Wear appropriate personal protective equipment when working or handling metal foil. Always thoroughly wash your hands after handling this product. DO NOT touch or rub eyes until hands are washed. Do not eat, drink or smoke when handling this product. Utilize exhaust ventilation especially during heating product.

7.2 Conditions for Safe Storage, including any incompatibilities:
Storage Precautions: Store product in tightly capped original containers in a cool, dry area. Refer to product label and product data sheet for specific storage temperature requirements.
 Rotate stock to ensure use before expiration date.

7.3 Specific End Use(s): Soldering type applications

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters:

			<u>TWA</u>	<u>STEL</u>
		<u>CAS#/EINECS#</u>	mg/m3	mg/m3
ALUMINUM FOIL	25 – 50	7429-90-5/231-072-3		
		German	4	-
		Portugal	10	-
		Poland	2.5	-
		Norway	5	-
		Ireland	10 (inhalable dust)	-
		Romania	3	10
		Bulgaria	10	-
		Estonia	10	-
		United Kingdom	10	-
		France	10	-
		Spain	10	-
		Austria	10	20

		Denmark	5	-
		Hungary	6	-
		Latvia	2	-
PROPRIETARY	50-75	1314-13-2		
COATING COMPOUND				
THERMAL GREASE MIXTURE				
		France	10	-
		Spain	2	10
		Portugal	2	10
		Finland	2	10
		Poland	5	10
		Norway	5	10
		Bulgaria	5	10
		Ireland	2	10
		Hungary	5	20
		Romania	5	10
		Denmark	4	-

N.E. = Not established

TWA= time weighted average

STEL= short term exposure limit

8.2 Exposure Controls:

Engineering Controls: Use with adequate exhaust ventilation and other safety features specifically designed for chemical use. Use exhaust ventilation when using the product especially while heating product. Air emission control equipment may be necessary based on the local governmental requirements for contaminants entering the atmosphere.

Personal protection:

Eyes: Chemical safety glasses/goggles. Face shield for splash hazard.

Respiratory: An approved or EU compliant CE marked air-purifying respirator with a fume/organic chemical cartridge is recommended under certain circumstances where airborne concentrations are expected to be elevated.

Skin: Gloves-leather or impervious (vinyl) type. Heat resistant gloves if handling hot metal. Safety type boots. Personal protective equipment is recommended when working with molten metal to avoid burns.

Other: Lab coat, safety shower and eye-wash fountain in work area. Avoid the use of contact lenses in high fume/dusty areas.

Work/Hygienic Practices: Maintain good housekeeping. Clean up spills immediately.

Good personal hygiene is essential. Avoid eating, smoking or drinking in the work area. Wash hands

thoroughly with soap and water immediately upon leaving the work area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:	Solid metal	Boiling Point/Range:	Not determined
Odor:	Odorless.	Melting Point/Freezing Point:	Not applicable
Odor Threshold:	Not established	Evaporation Rate:	Not applicable
Specific Gravity:	2.7	pH:	Not applicable
Vapour Pressure:	Not applicable.	Solubility in Water:	Insoluble
Vapour Density:	(air=1) Not applicable.	Partition coefficient:	Not established
Relative Density:	Not established	Flammability:	Not applicable
Flash Point:	565 F (296C)	Method:	Not applicable
Auto-ignition Temperature:	Not applicable	Flammable Limits:	Limits not established
UEL/LEL Limits:	Not applicable	Decomposition Temp:	Not applicable
Viscosity:	Not established	Explosive properties:	Not applicable
Oxidizing Properties:	Not established		

9.2 Other Information: Above data for the whole mixture.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:	Stable.
10.2 Chemical Stability:	Stable
10.3 Possibility of Hazardous Reactions:	Not established
10.4 Conditions To Avoid:	Open flame
10.5 Incompatible Materials:	Avoid contact oxidizing agents.
10.6 Hazardous Decomposition / Combustion:	Harmful organic fumes and toxic oxide fumes may form at elevated temperatures.
Hazardous Polymerization:	Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute toxicity:	Not established	Mutagenicity:	Not established
Irritation:	Not established	Toxicity for Reproduction:	Not Established
Corrosivity:	Not applicable	Absence of specific data:	None available (not tested)
Sensitization:	Not available		
Repeated dose toxicity:	Not established		
Carcinogenicity:	Not established		
Likely Routes of Entry:	eyes (irritation) /skin (irritation) /inhalation (irritation)		
Interactive effects:	None known		

Symptoms related to the physical, chemical and toxicological characteristics:

May cause irritation to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

None known

Mixture verses substance information: None known

Other Information:

Carcinogenicity: NTP: No (National Toxicity Program)
Listing OSHA: No (US Occupational Safety & Health Administration)
IARC: No (UN International Agency for Research on Cancer)

SECTION 12. ECOLOGICAL INFORMATION

. Product mixture not tested.

- 12.1 Toxicity:** No information available
- 12.2 Persistence and degradability:** No information available
- 12.3 Bioaccumulative potential:** No information available
- 12.4 Mobility in soil:** No information available
- 12.5 Results of PBT and vPvB assessments:** No data is available, not applicable
- 12.6 Other adverse effects:** Avoid release to environment. Product contains a substance that is harmful to the aquatic environment.

SECTION 13. DISPOSAL CONSIDERATION**13.1 Waste treatment method:**

Dispose of in accordance with environmental regulations. Containerize material and classify according to applicable regulations. Do not dispose of down any drain or waterway. Utilize the same personal protective equipment as the user when handling for disposal.

RoHS 2 (Restriction of Hazardous Substances): Compliant with RoHS (2011/65/EU).

SECTION 14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

Solid metal non-hazardous.

Not regulated/non-hazardous under US DOT (United States Department of Transportation).

Not regulated/non-hazardous under international shipping requirements.

14.1	<u>UN Number</u>	None
14.2	<u>UN proper shipping name:</u>	None
14.3	<u>Transport hazard class(s):</u>	None
14.4	<u>Packing group:</u>	None
14.5	<u>Environmental hazards:</u>	None
14.6	<u>Special precautions for user:</u>	None
14.7	<u>Transport in bulk:</u>	Not applicable

SECTION 15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture:**

The information in this Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated hereunder (29 CFR 1910.1200 ET. SEQ.).

All ingredients are listed on the USEPA TSCA Inventory.

All ingredients are listed on EINECS.

Safety data sheet was developed using EC 1907/2006 amended as of 20 May 2010 EU No 453/2010 and information as stated under regulation EC No 1272/2008 CLP Regulation.

GHS = Global Harmonized System

CLP= Classification, labeling and packaging

Product complies with RoHS 2- (2011/65/EU)

Product does not contain any substances ozone depleting substances and therefore not subject to EC 2037/2000.

National Regulation (UK)

Management of Health and Safety at Work Regulations (1999)

Control of Substances Hazardous to Health Regulations (COSHH 2002)

Personal Protective Equipment Regulations (2002)

15.2 Chemical safety assessment: None performed for mixture.

SECTION 16. OTHER INFORMATION

NOTE: The Indium Corporation does not recommend, manufacture, market or endorse any of its products for human consumption.

Risk Phrases:

R36/37/38 Irritating to eyes, respiratory system and skin

Safety Phrases:

S20/21 When using do not eat, drink or smoke

S22 Do not breathe dust

S23 Do not breathe fumes

S24/25	Avoid contact with skin and eyes
S27	Take off immediately all contaminated clothing
S28	After contact with skin wash immediately with plenty of soap and water
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
S62	If swallowed, do not induce vomiting seek medical advice immediately and show container or label

Revised Date: 22 APRIL 2015

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Changes provided on this SDS were based on the requirements of EU No. 453/2010 of May 20, 2010 regarding amendments to EC No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

Abbreviations and acronyms:

CAS No. –Chemicals Abstracts Service Number

CLP- Classification Labeling and Packaging Regulation

GHS - Global Harmonized System

EC- European Commission

EC No. – European Chemical Number: EINECS/ELINCS/ NLP

EINECS – European Inventory of Existing Commercial Chemical Substances

EU- European Union

NTP- National Toxicity Program

OSHA - US Occupational Safety & Health Administration

IARC - UN International Agency for Research on Cancer

UN – United Nations

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