

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product Name : Mercury Indicator Powder
Product code : 5230 series
Synonyms : Mercsorb® Mercury Indicator Powder

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Used to convert elemental mercury into an amalgam, which stops dangerous mercury vapours from being emitted. For professional use only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Company

NPS Corporation
3303 Spirit Way
Green Bay, WI 54304
800-558-5066
npscorp.com

1.4. Emergency telephone number

Emergency number : (800) 424-9300 (USA); +1 (703) 527-3887 (International and Maritime) CHEMTREC

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302
Skin Irrit. 2 H315
Eye Dam. 1 H318
Skin Sens. 1 H317
STOT RE 1 H372
Aquatic Acute 1 H400
Aquatic Chronic 2 H411

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xn; R22

Xi; R41

Xi; R38

R43

T; R48/25

N; R50

N; R51/53

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05



GHS07



GHS08



GHS09

Signal word (CLP) :

Danger

Hazardous ingredients :

Copper iodide (CuI)

Hazard statements (CLP) :

H302 - Harmful if swallowed
H315 - Causes skin irritation

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Precautionary statements (CLP)	H317 - May cause an allergic skin reaction
	H318 - Causes serious eye damage
	H372 - Causes damage to organs through prolonged or repeated exposure
	H400 - Very toxic to aquatic life
	H411 - Toxic to aquatic life with long lasting effects
	: P260 - Do not breathe dust.
	P264 - Wash hands, forearms, and exposed areas thoroughly after handling.
	P270 - Do not eat, drink or smoke when using this product.
	P272 - Contaminated work clothing must not be allowed out of the workplace.
	P273 - Avoid release to the environment.
	P280 - Wear eye protection, protective clothing, protective gloves.
	P301+P312 - IF SWALLOWED: Call a doctor, a POISON CENTER if you feel unwell.
	P302+P352 - IF ON SKIN: Wash with plenty of water.
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310 - Immediately call a doctor or POISON CENTER.
	P321 - Specific treatment (see Section 4).
	P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention.	
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.	
P362 - Take off contaminated clothing and wash before reuse.	
P391 - Collect spillage.	
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.	

2.3. Other hazards

Other hazards not contributing to the classification : Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Sulfur	(CAS No) 7704-34-9 (EC no) 231-722-6 (EC index no) 016-094-00-1	65	Xi; R38
Copper iodide (CuI)	(CAS No) 7681-65-4 (EC no) 231-674-6	25	Xn; R22 Xi; R41 Xi; R38 R43 T; R48/25 N; R50 N; R51/53
Silica, amorphous, precipitated and gel	(CAS No) 112926-00-8 (EC no) 601-214-2	10	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sulfur	(CAS No) 7704-34-9 (EC no) 231-722-6 (EC index no) 016-094-00-1	65	Skin Irrit. 2, H315

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Copper iodide (CuI)	(CAS No) 7681-65-4 (EC no) 231-674-6	25	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Silica, amorphous, precipitated and gel	(CAS No) 112926-00-8 (EC no) 601-214-2	10	Not classified

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).
- First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
- First-aid measures after skin contact : Rinse immediately with plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.
- First-aid measures after eye contact : Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
- First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction.
- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause skin irritation.
- Symptoms/injuries after eye contact : May cause eye irritation.
- Symptoms/injuries after ingestion : Ingestion is likely to be harmful or have adverse effects.
- Chronic symptoms : Causes damage to organs through prolonged or repeated exposure.

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

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire. Application of water stream to hot product may cause frothing and increase fire intensity.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not considered flammable but may burn at high temperatures.
- Explosion hazard : Product is not explosive.
- Reactivity : Hazardous reactions will not occur under normal conditions.

5.3. Advice for firefighters

- Precautionary measures fire : Exercise caution when fighting any chemical fire.
- Firefighting instructions : Use water spray or fog for cooling exposed containers.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : Refer to Section 9 for flammability properties.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all contact with skin, eyes, or clothing. Avoid breathing dust.

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6.1.1. For non-emergency personnel

Protective equipment : Use appropriate personal protection equipment (PPE).

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain and collect as any solid. Avoid generating dust.

Methods for cleaning up : Clear up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible products : Strong acids. Strong bases. Strong oxidizers.

7.3. Specific end use(s)

Used to convert elemental mercury into an amalgam, which stops dangerous mercury vapors from being emitted. For professional use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sulfur (7704-34-9)		
Latvia	OEL TWA (mg/m ³)	6 mg/m ³
Lithuania	IPRV (mg/m ³)	6 mg/m ³
Romania	OEL STEL (mg/m ³)	15 mg/m ³ (dust)
Silica, amorphous, precipitated and gel (112926-00-8)		
Austria	MAK (mg/m ³)	4 mg/m ³ (inhalable fraction)
Belgium	Limit value (mg/m ³)	10 mg/m ³
Bulgaria	OEL TWA (mg/m ³)	10,0 mg/m ³ (inhalable fraction)
Switzerland	VME (mg/m ³)	4 mg/m ³ (inhalable)
Finland	HTP-arvo (8h) (mg/m ³)	5 mg/m ³
Poland	NDS (mg/m ³)	10,0 mg/m ³ (total inhalable dust) 2 mg/m ³ (respirable dust)

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal protective equipment : Protective goggles. Gloves. Protective clothing.



Materials for protective clothing : Chemically resistant materials and fabrics.

Hand protection : Wear chemically resistant protective gloves.

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Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Use an approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.
Environmental exposure controls	: Do not allow the product to be released into the environment.
Consumer exposure controls	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Tan powder
Odour	: Chalky
Odour threshold	: No data available
pH	: 6,5
Evaporation rate	: No data available
Melting point	: Decomposes > 120 °C (248 °F)
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Density	: 0,77 g/ml
Solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: < 1 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Sulfur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Oral: Harmful if swallowed.
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ATE CLP (oral)	2.000,00 mg/kg bodyweight
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Sulfur (7704-34-9)

LD50 oral rat	> 3000 mg/kg
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Sulfur (7704-34-9)	
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 9,23 mg/l/4h

Copper iodide (CuI) (7681-65-4)	
ATE CLP (oral)	500,00 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Silica, amorphous, precipitated and gel (112926-00-8)	
IARC group	3

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Sulfur (7704-34-9)	
LC50 fishes 1	866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1	736 mg/l
LC50 fish 2	14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

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14.5. Environmental hazards

Dangerous for the environment



Other information

: No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	Sulfur
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Mercury Indicator Powder is not on the REACH Candidate List

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances.

VOC content

: < 1 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Revision date

: 06/11/2014

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
Skin Sens. 1A	Sensitisation — Skin, category 1A
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction

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H318	Causes serious eye damage
H319	Causes serious eye irritation
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
R11	Highly flammable
R22	Harmful if swallowed
R36/38	Irritating to eyes and skin
R38	Irritating to skin
R41	Risk of serious damage to eyes
R43	May cause sensitisation by skin contact
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed
R50	Very toxic to aquatic organisms
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
F	Highly flammable
N	Dangerous for the environment
T	Toxic
Xi	Irritant
Xn	Harmful

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.