

## Material Safety Data Sheet

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	IG-11	ISEM-1	ISO-63	SIC-6	TTK-4	HPG-51	YS-33
	IG-12	ISEM-2	ISO-66	SIC-12	TTK-5	HPG-53	
	IG-15	ISEM-3	ISO-68		TTK-8	HPG-59	
	IG-19	ISEM-7	ISO-86		TTK-9	HPG-81	
	IG-43	ISEM-8	ISO-88		TTK-50	HPG-83	
	IG-56						
	IG-67						
	IG-70						

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### 2. HAZARDS IDENTIFICATION

GHS classification Does not fall under classification criteria.

Physical hazards: No known hazards.

Health hazards: No known hazards.

Environmental hazards: No known hazards.

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Single substance or mixture: Chemical substance

Chemical name: Carbon/graphite

Content:  $\geq 99.9$  mass%

Chemical formula: C

Publication number in Japanese official gazette (Chemical Substance Control Law, Industrial Health and Safety Act, PRTR law, Poisonous and Deleterious Substances Control Law): N/A

CAS No.: 7782-42-5

UN hazard class and no.: N/A.

### 4. FIRST AID MEASURES

IF INHALED:	If dust is inhaled, remove victim to fresh air. If breathing feels abnormal: get medical attention immediately.
IF ON SKIN:	Wash the affected area thoroughly with soap and water.
IF IN EYES:	Do not rub eyes. Rinse immediately with plenty of water. If you feel any foreign object or pain, get attention from an ophthalmologist.
IF SWALLOWED:	Induce vomiting. Gargle with water and wash inside of mouth thoroughly. If you notice anything unusual, get advice from a doctor/physician immediately.

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## 5. FIREFIGHTING MEASURES

Extinguishing methods: For incipient fire use extinguishing media such as powder, carbon dioxide, foam or sand. If small amount or not red-hot, rapidly cool with copious amounts of water. If large amount and red-hot (800°C or above), do not use water. Use of water is prohibited because water gas (containing hydrogen gas) is produced and there is a possibility of causing secondary damage.

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## 6. ACCIDENTAL RELEASE MEASURES

This material is a solid and does not leak or spill like a powder or liquid product. However, if dust is generated through damage, clean up using vacuum suction or similar method and place in container.

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## 7. HANDLING AND STORAGE

**Handling:** The surface is slippery. Use anti-slip gloves and safety shoes.  
Do not climb on top of the material.  
This material is brittle, so avoid impacts.  
Do not use fire at locations where this material is handled.  
Take care to avoid toppling, dropping, impacts, etc.

**Storage:** Store indoors at normal temperature and atmosphere, in a place where the material will not become wet or damaged.  
Do not stack unpackaged.  
Do not use fire.  
Avoid storage or contact with strong oxidizing agents.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

If dust is generated:

Allowable concentration: Japan Society for Occupational Health  
Recommended Levels (set in 2009 edition):  
Type I dust (Graphite) Respirable dust 0.5 mg/m<sup>3</sup>  
Total dust 2 mg/m<sup>3</sup>

Equipment measures: Install local exhaust ventilation system.  
Protective equipment: Wear dust goggles, dust mask, gloves and long-sleeved work clothes.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Black solid  
Odor: Odorless  
Melting point: None at normal pressure.  
Boiling point: None at normal pressure. (Sublimation temperature: 3650°C)  
Flash point: None  
Vapor pressure: Negligible at room temperature.  
Density: 1.9–2.2 Mg/m<sup>3</sup> (Bulk density: 1.6–2.0 Mg/m<sup>3</sup>)  
Solubility: Insoluble in water and organic solvents.  
Ignition point: None  
Electric conductivity: Exhibits electric conductivity.

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10. STABILITY AND REACTIVITY

Oxidation properties: None (room temperature)

Self-reactivity and explosibility: None

Stability and reactivity: Stable under normal handling conditions

Note that contact with strong oxidizing agents can cause oxidation reactions. If this occurs, carbon monoxide and/or carbon dioxide are produced.

Combustion (surface) occurs in normal atmosphere at  $\geq 600^{\circ}\text{C}$ .

If dust is produced by cutting or abrasion, dust explosion can occur.

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11. TOXICOLOGICAL INFORMATION

None known.

However, inhalation of large quantities of dust over a long period can cause damage such as pneumoconiosis.

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12. ECOLOGICAL INFORMATION No known hazards.

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13. DISPOSAL CONSIDERATIONS

Treat as industrial waste and dispose of using an industrial waste disposal business.

Comply with the relevant laws and regulations if coming into contact with hazardous materials during use.

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14. TRANSPORT CONSIDERATIONS

When transporting, ensure there is no toppling, dropping, collision, etc.

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15. REGULATORY INFORMATION

Not covered by any laws or regulations.

However, if dust is generated, the Industrial Health and Safety Law (Dust Hazard Prevention Regulations) applies.

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16. OTHER INFORMATION

Shield from organic gas environments. Gas is adsorbed, then rapidly desorbed during use.

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REMARKS

- This information has been compiled from materials, information and data available at the time. However, no guarantees are made regarding this information.
- The advice given relates to normal handling. The user should implement the appropriate safety measures according to individual use.
- This data may be revised without notification. For the latest version and any other questions, please contact our sales department.