

Safety Data Sheet (SDS)

1. Product & Company Identification

Product Name

Agent for Neo Metal Guard

Manufacturer

: Yamato Protec Corporation

Address

: 5-17-2 Shirokanedai, Minato-ku, Tokyo

Phone Number

: 0570-080100 (Navi Dial)

Department

: Technical Support

Suggested Use & Limitations on Use

: Extinguishing agent for metal fire

2. Hazards Identification

GHS Classification

Items not listed below are “Not classified”, “Unclassifiable”

Health Hazards

Acute Toxicity (Oral)

: Category 4

Serious Eye Damage/Eye Irritation

: Category 2B

Sensitisation, respiratory

: Category 1

Carcinogenicity

: Category 2

Reproductive Toxicity

: Category 2

Specific Target Organ/Systemic Toxicity (Single exposure):

Category 3 (Airway resistance irritation)

Specific Target Organ/Systemic Toxicity (Repeated exposure):

Category 1 (Thyroid gland)

Environmental Hazards

Hazardous to the aquatic environment – Acute hazard

: Category 2

Hazardous to the aquatic environment – Long term hazard

: Category 2

Representation or Symbol



Alert Level

: Danger

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Hazard/Toxicity Information

Toxic if swallowed

Causes eye irritation

May cause an allergic skin reaction

Suspected of causing cancer

May damage fertility or the unborn child

Causes damage to Airway resistance irritation.

Causes damage to Thyroid gland through prolonged or repeated exposure.

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

Cautionary

Safety Precautions

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

Wear respiratory protection.

First Aid Measures

IF SWALLOWED

Call a POISON CENTER/doctor if you feel unwell.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

IN INHALED

Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

If exposed

Get medical advice/attention.

Storage

Avoid high humidity, keep the product within the operating temperature range, and if possible, under lock indoors.

Disposal

The contents and the container should be disposed of by waste disposal contractors licensed by the Governor.

3. Composition/Information on Ingredients

Single Component or Mixture : Mixture
Chemical Name or Common Name : Extinguishing agent for metal fire

Chemical Name or Common Name	CAS Number	Official Gazette Reference Code	Concentration or Concentration Range
Graphite	7782-42-5	None	60 to 80%
Thiourea	62-56-6	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. 2-1733	5 to 15%
Silica	7631-86-9	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. 1-548	1 to 10%

4. First Aid Measures

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

IF ON SKIN

If skin irritation occurs: Get medical advice/attention

IF IN EYES

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/ attention.

IF SWALLOWED

Call a POISON CENTER/ doctor if you feel unwell.

If exposed or concerned

Get medical advice/attention.

5. Fire Fighting Measures

Fire Extinguishing Agent : Not applicable due to non-combustibility
Fire Extinguishing Agent Not To Be Used : Not applicable
Special Hazards : No data available
Special Fire Fighting Procedures : Not applicable
Protection of Fire Fighters : Not applicable

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6. Leakage Measures

Personal Precautions, Protective Equipment and Emergency Measures

Immediately isolate the appropriate distances in all directions as leakage area.

Prohibit unauthorized persons from entering the area.

The workers should wear suitable protective equipment (See “8. Exposure Prevention and Protection Measures”) and avoid eye or skin contact and inhalation.

Do not touch any damaged container or leaked material without wearing suitable protective clothing.

Stay in the wind.

Leave depression.

Ventilate sealed places.

Environmental Precautions

Be careful not to affect the environment by discharging into rivers and others.

Dispose of the collection as industrial waste.

Collection, neutralization, containment, and cleanup procedures and equipment

Sweep scattered matter together into a sealable container and dispose of it according to “13. Disposal Considerations”. Then, wash off with plenty of water. In this case, be careful so that thick waste fluid does not flow into rivers and others.

Prevention of Secondary hazards

Collect leaked material immediately.

Prohibit unauthorized persons from entering the area around the leaked place.

In the case of inflow into rivers or public waterways, report to the person in charge of pollution in the local government immediately.

7. Handling and Storage Instructions

Handling

Technical Measures : Implement measures stated in “8. Exposure Prevention and Protection Measures” and wear suitable protective equipment such as protective glasses and gloves.

Local Exhaust and Whole Ventilation : Implement local exhaust and whole ventilation stated in “8. Exposure Prevention and Protection Measures.”

Safe Handling Instructions : Use only outdoors or in a well-ventilated area.
Avoid contact, inhalation or swallowing.
Wash hands thoroughly after handling.

Storage

Storage Conditions : Avoid high humidity, keep the product within the operating temperature range, and if possible, under lock indoors.

Container and Packing Material : Applicable discharger

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8. Exposure Prevention and Protection Measures

Allowable Concentration (Exposure limit, biological exposure index)

Graphite

Japan Society for Occupational Health (2011 edition) 0.5 mg/m³

Silica

Japan Society for Occupational Health (2015 edition):

Dust of Category III	Respirable dust	2 mg/m ³
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	Total mine dust	8 mg/m ³
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ACGIH (2011 edition):	TLV-TWA	10 mg/m ³
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Equipment Measures

Install exhaust equipment in the dust work place.

Protective Equipment

Respiratory Protective Equipment	: Wear suitable respiratory protective equipment.
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Hand Protection	: Wear suitable protective gloves.
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Eye Protection	: Use suitable eye protection.
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Skin and Body Protection	: Wear suitable protective clothing and masks.
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9. Physical and Chemical Properties

Physical State	: powder
Color	: Black
Odor	: Unique odor
Melting Point/Freezing Point	: No data available
Boiling Point, initial boiling point and Boiling Range	: No data available
Flammability	: Not applicable
Lower and upper explosion limit/ flammability limit	: Not applicable
Flash Point	: No data available
Autoignition Temperature	: No data available
Decomposition Temperature	: No data available
pH	: No data available
Kinematic viscosity	: No data available
Solubility	: No data available
Partition coefficient n-octanol/ water (log value)	: No data available
Vapor Pressure	: No data available
Density and/ or relative density (specific gravity)	: No data available
Relative vapour density	: No data available
Particle characteristics	: Trade secret

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10. Stability and Reactivity

Reactivity	: No data available
Chemical stability	: Stable under normal handling conditions.
Hazardous Reactivity	: No hazardous reactivity under normal handling conditions
Conditions to Avoid	: No data available
Incompatible Hazardous Materials	: No data available
Hazardous Decomposition Products	: No data available

11. Toxicological Information

Acute Toxicity	
Oral	: Category 4
Demal	: Not classified
Inhalation :Gass	: Unclassifiable
:Vapours	: Unclassifiable
:Dust and Mist	: Unclassifiable
Skin Corrosion/Irritation	: Unclassifiable
Serious Eye Damage/Eye Irritation	: Category 2B
Respiratory or Skin Sensitization	: Category 1
Germ-Cell Mutagenicity	: Unclassifiable
Carcinogenicity	: Category 2
Reproductive Toxicity	: Category 2B
Specific Target Organ Toxicity (Single exposure):	: Category 3 (Airway resistance irritation)
Specific Target Organ Toxicity (Repeated exposure):	: Category 1 (Thyroid gland)
Aspiration Hazard	: Unclassifiable

12. Environmental Impact Information

Ecotoxicity	
Hazardous to the aquatic environment – Acute hazard	: Category 2
Hazardous to the aquatic environment – Long term hazard	: Category 2
Persistence and Decomposability	: No data available
Bioaccumulation	: No data available
Migration in Soil	: No data available
Hazardous to the ozonelayer	: Unclassifiable

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13. Disposal Considerations

Residual Waste

Disposal should be in accordance with applicable laws and local regulations. The substance should be disposed of by waste disposal contractors licensed by the Governor or by local public entities if appropriate.

Waste disposal contractor, if used, should be well informed of potential hazards and toxicity from the waste.

Contaminated Containers and Packages

Containers should be properly disposed of in accordance with applicable laws and local regulations. If containers are disposed of, their contents should be completely removed.

14. Transport Considerations

United Nations Number	: None (UN1044 applies if filled in a metal container.)
Product Name	: Fire extinguisher
United Nations Classification	: None (High pressure gas applies if filled in a metal container.)
Container Class	: None
Marine Pollution Materials	: No data available
Special Safety Measures	: None
National Regulations:	
Land Regulatory Information	Follow the provisions of the Fire Service Act
Aeronautical Regulatory Information	Follow the provisions of the Civil Aeronautics Act
Maritime Regulatory Information	Follow the provisions of the Ship Safety Act
REMARKS	: Show transport considerations as a discharger.

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15. Applicable Laws

Industrial Safety and Health Act

Dangerous or Harmful Substances Subject to be Indicated their Names, etc.

(Appended Table 9, Order Article 18 (1) & (2), Article 57-1 of the Act)

Thiourea, silica

Dangerous or Harmful Substances Subject to be Notified their Names, etc.

(Appended Table 9, Order Article 18-2 (1) & (2), Article 57-2 of the Act)

Thiourea (Cabinet Order No. 340): 5 to 15%

Silica (Cabinet Order No. 312) : 1 to 10%

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Law)

Class I Designated Chemical Substance Thiourea (Cabinet Order No. 245)

Poisonous and Deleterious Substances Control Act

Not applicable

Fire Service Act

Not applicable as dangerous goods

Civil Aeronautics Act

Not applicable

Ship Safety Act

Not applicable

Water Pollution Control Act

Not applicable

Sea Pollution Prevention Act

Not applicable

16. Other Information

This product should be used with the understanding that the use of any chemicals involves unknown potential hazards and toxicity. Hazards and toxicity depend on the environment of use and the storage conditions and period. We suggest that those with knowledge and experience be involved in all stages from use through storage and disposal.

The instructions provided in this document should apply when the product is handled normally. If the product is handled in a special way, proper safety precautions should be taken. Also, it should be used under the responsibility of the user.

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