

Blackening Liquid (TBZ-40)	SDS No.	1924
TRUSCO NAKAYAMA CORPORATION	Revision Date	May. 19, 2025

## SAFETY DATA SHEET(SDS)

### 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name : Blackening Liquid (TBZ-40)  
 Company Name : TRUSCO NAKAYAMA CORPORATION  
 Address : 28-1 SHINBASHI 4-chome,MINATO-KU,TOKYO,JAPAN  
 Phone Number : 0120-509-849  
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 Mail Address : techno.center@trusco.co.jp

### 2 HAZARDS IDENTIFICATION

#### Hazards Category

Skin Corrosion/Irritation : Category 1A  
 Serious Eye Damage/Eye Irritation : Category 1  
 Respiratory/Skin Sensitizer : Category 1  
 Respiratory/Skin Sensitizer : Category 1A  
 Carcinogenicity : Category 1A  
 Reproductive Toxicity : Category 1B  
 Specific Target Organ Systemic Toxicity(Single Exposure) : Category 2  
 Specific target organ systemic toxicity(Repeated exposure) : Category 1  
 Specific target organ systemic toxicity(Repeated exposure) : Category 2

The one without the description cannot be classified.

#### Allocation of Label Elements

##### Pictogram

Corrosive

Health Hazard



##### Signal Word

Danger

##### Hazard Statement

Causes severe skin burns and eye damage  
 Cause serious eye damage  
 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
 May cause an allergic skin reaction  
 May cause cancer  
 May damage fertility or the unborn child  
 May cause harm to breast-fed children  
 May cause damage to organs  
 Causes damage to organs through prolonged or repeated exposure  
 May causes damage to organs through prolonged or repeated exposure

##### Precautionary Statement

###### Prevention

Before use, read the safe data sheet (SDS).  
 Keep out of reach of children.  
 Do not handle until all safety precautions have been read and understood.  
 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
 Do not breathe dust/fume/gas/mist/vapours/spray.  
 Avoid contact during pregnancy/while nursing.  
 Wash points of contact thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 Wear protective gloves/protective clothing/eye protection/face protection/respiratory protection.

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#### Response

In case of fire : Use dry chemical, carbon dioxide(CO<sub>2</sub>), and foam to extinguish.  
 IF SWALLOWED : Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.  
 IF ON SKIN : Wash with plenty of soap and water.  
 If skin irritation or rash occurs : Get medical advice/attention.  
 IF INHALED : Remove person to fresh air and keep comfortable for breathing.  
     Get medical advice/attention if you feel unwell.  
 IF IN EYES : Rinse cautiously with water for several minutes. Get medical advice/attention.  
 If experiencing respiratory symptoms : Call a POISON CENTER/doctor.  
 If exposed or concerned : Get medical advice/attention.  
 Take off contaminated clothing.  
 Wash contaminated clothing before reuse.

#### Storage

Store locked up.  
 Store in a well-ventilated place. Keep container tightly closed. Keep cool.

#### Disposal

Dispose of contents /container in accordance with local/regional/national/international regulations.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients and Contents

Component name	CAS number	wt%
Water	7732-18-5	90~100
1-Hydroxyethane-1,1-diylbis(phosphonic acid)	2809-21-4	1~5
Nickel(II) sulfate hexahydrate	10101-97-0	1~5
Hexaammonium molybdate, tetrahydrate	12054-85-2	<1
Tellurium oxide (TeO <sub>2</sub> )	7446-07-3	<1

### 4 FIRST-AID MEASURES

#### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Call a physician if you feel unwell.

#### Skin

Wash with plenty of soap and water.  
 Call a physician if you feel unwell.

#### Eye

Immediately flush eyes with plenty of water for at least 15 minutes.  
 Call a physician.

#### Ingestion

Rinse mouth. Do not induce vomiting.  
 Call a physician.

### 5 FIRE-FIGHTING MEASURES

#### Extinguishing Media

Dry chemical, carbon dioxide(CO<sub>2</sub>), and foam

#### Specific Fire Fighting

If it becomes a fire, you are using the extinguishing agent to extinguish.  
 Quickly removed from the surrounding flammable.  
 The use of extinguishing agents specified.  
 Fire fighting is done from the windward.  
 On small fires use carbon dioxide (CO<sub>2</sub>) or dry chemical.  
 On large fires use dry chemical or foam.  
 Sealed containers that are exposed to high temperatures over the water to cool.

#### Protection for Fire-fighter

Wear full body protective clothing with breathing apparatus.

### 6 ACCIDENTAL RELEASE MEASURES

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#### Personal Precautions

Wear protective equipments in case of operation.

#### Environmental Precautions

Avoid release to the environment.

#### Methods for Cleaning Up

Remove potential ignition source in vicinity as soon as possible.

Spilled material is collected in a container that can be sealed, then remove to safe place.

Deposits, waste treatment is based on the local regulations.

Working from the windward, to evacuate people downwind.

## 7 HANDLING AND STORAGE

### Handling

Use in a well ventilated area.

Keep away from heat, spark and flames.

After handling, wash well hands and face and rinse your mouth.

Facilities storing or utilizing this material should be equipped with an eye wash facility and a safety shower.

Leakage, overflow, to prevent scattering, we do not generate steam in vain.

In the handling area and deny unnecessary entry.

Resting place shall not bring contaminated protective equipment such as gloves.

Wear protective equipments when risk of exposure occurs.

To work in an enclosed area that you work with appropriate protective equipment with a local exhaust ventilation sufficient.

### Precautions

Do not breathe vapor or mist.

Handling of the outdoors, as much as possible to work from the windward.

### Handling Precautions for Safety

Avoid physical damage to containers.

Keep containers securely sealed when not in use.

### Storage

Fire prohibited strictly.

Keep away from sources of ignition.

Store in a cool, dry, well-ventilated area away from incompatible substances.

Separate from oxidizing materials.

Store in a tightly closed container.

### Safe containers and packaging materials

There is a risk of corrosion in metallic materials.

## 8 EXPOSURE/PERSONAL PROTECTION

### Engineering Controls

Attach an exhaust device to prevent vapor from staying.

That the equipment and shall become hot, and the source of ignition in the vicinity of the location, such as handling not been placed.

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Exposure Limit Values

Chemical name	ACGIH
Nicke(II) sulfate hexahydrate	TWA 0.1mg/m <sup>3</sup>
Hexaammonium molybdate, tetrahydrate	TWA 0.5mg/m <sup>3</sup> (R), STEL - (as Mo Soluble compounds)
Tellurium oxide (TeO <sub>2</sub> )	TWA 0.1mg/m <sup>3</sup> , STEL - (as Te, excluding hydrogen telluride)

### Personal Protective Equipment

#### Respiratory Protection

Anti-mist mask if necessary

#### Skin Protection

Rubber gloves

#### Eye Protection

Wear chemical worker's goggles.

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#### Skin and body protection

Such as long-sleeved work clothes

#### Hygiene measures

Do not eat, drink or smoke during work.

Replacement of the adsorbent, such as the mask is performed each time or use plans.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Liquid
Color	:	Green transparent
Odor	:	Slight odor
pH	:	2
Boiling Point(°C)	:	Not available
Melting Point(°C)	:	Not available
Flammability	:	Not available
Flash point(°C)	:	None
Auto-ignition Temperature(°C)	:	Not available
Flammability or Explosive Limits		
Lower	:	Not available
Upper	:	Not available
Vapour Pressure (KPa)	:	Not available
Vapour Density	:	Not available
Relative density(g/cm3)	:	1.04
Solubility	:	Soluble in water
Partition Coefficient: n-octanol/water	:	Not available
Decomposition Temperature(°C)	:	Not available
Dynamic viscosity rate	:	Not available
Relative gas density	:	Not available
Particle properties	:	Not available

## 10 STABILITY AND REACTIVITY

#### Stability

Stable under normal temperatures and pressures.

#### Reactivity

No self-reactive

#### Conditions to Avoid

Heat, flames, ignition sources and incompatibles.

Contact fire, alkalis, amines, phosphorus trichloride, and phospholipids chloride

#### Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and other oxidized substances.

## 11 TOXICOLOGICAL INFORMATION

Chemical name	Acute toxicity (oral)	Acute toxicity (dermal)	Acute toxicity (inhalation: gas)	Acute toxicity (inhalation: vapour)	Acute toxicity (inhalation: dust, mist)	Skin corrosion / irritation	Serious eye damage / eye irritation
Water	Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category
1-Hydroxyethane-1,1-diylbis(phosphonic acid)	Category 4	Not applicable to category	Not applicable to category	Classification not possible	Classification not possible	Category 1	Category 1
Nickel(II) sulfate hexahydrate	Category 3	Classification not possible	Not applicable to category	Not applicable to category	Classification not possible	Classification not possible	Classification not possible

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Hexaammonium molybdate, tetrahydrate	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Tellurium oxide (TeO <sub>2</sub> )	Not applicable to category	Classification not possible	Not applicable to category	Not applicable to category	Classification not possible	Classification not possible	Classification not possible

Chemical name	Respiratory/skin sensitizer	Germ cell mutagenicity	Carcinogenicity	Toxic to reproduction	Specific target organs/systemic toxicity following single exposure	Specific target organs/systemic toxicity following repeated exposure	Aspiration hazard
Water	Respiratory sensitizer: Not applicable to category; Skin sensitizer: Not applicable to category	Not applicable to category	Not applicable to category	Not applicable to category	Not classified	Not classified	Not applicable to category
1-Hydroxyethane-1,1-diylbis(phosphonic acid)	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Classification not possible	Classification not possible	Category 2 (systemic toxicity)	Classification not possible	Classification not possible
Nickel(II) sulfate hexahydrate	Respiratory sensitizer: Category 1; Skin sensitizer: Category 1A	Classification not possible	Category 1A	Classification not possible	Classification not possible	Category 1 (respiratory organs); Category 2 (liver, testes)	Classification not possible
Hexaammonium molybdate, tetrahydrate	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Tellurium oxide (TeO <sub>2</sub> )	Respiratory sensitizer: Classification not possible; Skin sensitizer: Classification not possible	Classification not possible	Classification not possible	Category 1B	Classification not possible	Category 2 (central nervous system, testes, respiratory organs)	Classification not possible

## 12 ECOLOGICAL INFORMATION

Chemical name	Hazardous to the aquatic environment (Acute)	Hazardous to the aquatic environment (Chronic)	Hazard to the ozone layer	Residuality and decomposition	Ecological accumulation	Mobility in soil
Water	Not applicable to category	Not applicable to category	Classification not possible	No data	No data	No data
1-Hydroxyethane-1,1-diylbis(phosphonic acid)	Not applicable to category	Not applicable to category	Classification not possible	No data	No data	No data
Nickel(II) sulfate hexahydrate	Classification not possible	Classification not possible	Classification not possible	No data	No data	No data

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Hexaammonium molybdate, tetrahydrate	Classification not possible	Classification not possible	Classification not possible	No data	No data	No data
Tellurium oxide (TeO2)	Classification not possible	Classification not possible	Classification not possible	No data	No data	No data

13 DISPOSAL CONSIDERATIONS  
 Dispose of contents /container in accordance with local/regional/national/international regulations.

14 TRANSPORT INFORMATION  
 UN Class  
     Corrosive substance, Class 8  
 UN No.  
     UN1760  
 Packing Group  
     II

15 REGULATORY INFORMATION  
 Follow all regulations in your country.

16 OTHER INFORMATION  
 References  
     JIS Z 7253 (2019)  
     GHS data-base (NITE)

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