

SAFETY DATA SHEET

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

1.1. Product identifier

Product Name AASE1

Synonyms 1000 µg/mL: Se

Substance/mixture Mixture

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

Recommended use Laboratory chemicals

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company

Inorganic Ventures
300 Technology Drive
Christiansburg, VA 24073
Phone: 1(800) 669-6799
Email: info@inorganicventures.com

1.4. Emergency telephone number

Chemtrec 1-800-424-9300 (North America)

Chemtrec +1 703-741-5970 (International)

Europe	See above
--------	-----------

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

GHS

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Corrosive to metals	Category 1 - (H290)

2.2. Label elements

Product identifier



Signal word
Warning

Hazard statements

H290 - May be corrosive to metals
H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary statements

P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear protective gloves, eye protection and face protection
P332 + P313 - If skin irritation occurs: Get medical advice and attention
P337 + P313 - If eye irritation persists: Get medical advice and attention
P390 - Absorb spillage to prevent material damage

2.3. Other hazards

Other hazards Harmful to aquatic life
No information available

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2. Mixtures

Chemical name	EC No. (Index No.)	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Nitric acid	231-714-2 (007-004-00-1) (007-030-00-3) (078-012-00-0)	7697-37-2	1.4	(EUH071) Skin Corr. 1A (H314) Ox. Liq. 3 (H272) Acute Tox. 3 (H331)	No data available
Selenium	231-957-4 (034-001-00-2)	7782-49-2	0.1	Acute Tox. 3 (H301) Acute Tox. 3 (H331) STOT RE 2 (H373) Aquatic Chronic 4 (H413)	No data available

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

SECTION 4: First aid measures**4.1. Description of first aid measures**

Inhalation Remove to fresh air.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Ingestion Clean mouth with water and drink afterwards plenty of water.

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

Most Important Symptoms and Effects Asthma-like and/ or skin allergy-like symptoms.

4.3. Indication of any immediate medical attention and special treatment needed**Notes to Physician**

Treat symptomatically

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****Personal Precautions**

Ensure adequate ventilation.

Advice for emergency responders

Ensure adequate ventilation.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up**Methods for Containment**

Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Ensure adequate ventilation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure Limits**

Chemical name	European Union (Directives 98/24/EC and 2004/37/EC)		United Kingdom	France (INRS ED 6443)	Spain (Occupational exposure limits for chemical agents in Spain, 2025)		Germany (DFG)
Nitric acid 7697-37-2	STEL: 1 ppm; STEL: 2.6 mg/m³;		STEL: 1 ppm; STEL: 2.6 mg/m³;	STEL-VLCT (indicatif): 1 ppm; STEL-VLCT (indicatif): 2.6 mg/m³;	STEL (VLA-EC): 1 ppm; STEL (VLA-EC): 2.6 mg/m³;		
Selenium 7782-49-2			TWA: 0.1 mg/m³; STEL: 0.3 mg/m³;		TWA-(VLA-ED): 0.1 mg/m³;	TWA-MAK: 0.02 mg/m³; II(8); inhalable fraction Sk	
Chemical name	Italy (Legislative Decree no. 81)		Portugal (NP 1796:2014)	Netherlands (Working Conditions Regulations)	Finland (HTP-ARVOT 2025)	Denmark (BEK no. 1619 of 19/12/2024)	
Nitric acid 7697-37-2	STEL: 1 ppm; STEL: 2.6 mg/m³;		TWA (VLE-MP): 2 ppm; STEL (VLE-CD): 1 ppm; STEL (VLE-CD): 2.6 mg/m³;	STEL: 0.5 ppm; STEL: 1.3 mg/m³;	TWA: 0.5 ppm; TWA: 1.3 mg/m³; STEL: 1 ppm; STEL: 2.6 mg/m³;	STEL: 1 ppm; STEL: 2.6 mg/m³;	
Selenium 7782-49-2			TWA (VLE-MP): 0.2 mg/m³;		TWA: 0.1 mg/m³; STEL: 0.3 mg/m³;	TWA: 0.1 mg/m³; STEL: 0.2 mg/m³;	
Chemical name	Sweden	Austria (GKV BGBl. II Nr. 330/2024)	Switzerland (MAK Values)	Poland (Legislative Journal 2018 item 1286)	Norway (FOR-2011-12-06-1358)	Ireland (CoP 2024)	
Nitric acid 7697-37-2	LLV: 0.5 ppm LLV: 1.3 mg/m³ Binding STLV: 1 ppm Binding STLV: 2.6 mg/m³	TWA-TMW: 1 ppm; TWA-TMW: 2.6 mg/m³; STEL-KZGW: 1 ppm (); STEL-KZGW: 2.6 mg/m³ (); Ceiling: 1 ppm; Ceiling: 2.6 mg/m³;	TWA-MAK: 2 ppm; TWA-MAK: 5 mg/m³; STEL-KZGW: 2 ppm; STEL-KZGW: 5 mg/m³;	TWA-NDS: 1.4 mg/m³; STEL-NDSCh: 2.6 mg/m³;	TWA: 2 ppm; TWA: 5 mg/m³; STEL: 4 ppm (value calculated); STEL: 10 mg/m³ (value calculated);	STEL: 1 ppm; STEL: 2.6 mg/m³;	
Selenium 7782-49-2	LLV: 0.1 mg/m³	TWA-TMW: 0.1 mg/m³; inhalable fraction STEL-KZGW: 0.3 mg/m³ (4 X 15 min); inhalable fraction	TWA-MAK: 0.02 mg/m³; inhalable dust STEL-KZGW: 0.16 mg/m³; inhalable dust Sk	TWA-NDS: 0.1 mg/m³; STEL-NDSCh: 0.3 mg/m³;	TWA: 0.05 mg/m³; STEL: 0.15 mg/m³ (value calculated); STEL: 0.15 mg/m³ (except Selenium sulfide, Hydrogen selenide and Selenium hexafluoride; value calculated); As	TWA: 0.1 mg/m³; STEL: 0.3 mg/m³ (calculated);	

Chemical name	European Union (Directive 98/24/EC)	United Kingdom	France (Decree 2009-157)	Spain (Occupational exposure limits for chemical agents in Spain, 2025)	Germany (TRGS 903)
Selenium					150 µg/L (serum -

7782-49-2					Selenium no restriction in steady state)
Chemical name	Austria (VGÜ 2008)	Switzerland (BAT Values)	Poland	Norway	Ireland (CoP 2024)
Selenium 7782-49-2		150 µg/L (serum - Selenium no restrictions) 2 µmol/L (serum - Selenium no restrictions)			

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration
(PNEC)

8.2. Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection

Wear safety glasses with side shields (or goggles).

Hand Protection

Impervious gloves.

Skin and Body Protection

Long sleeved clothing.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental Exposure Controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Appearance

clear /colorless

Odor

Odorless

pH - VALUE 1

No data available

Melting Point/Range

No data available

Initial boiling point and boiling range

100 °C / 212 °F

Vapor pressure @20 °C (kPa)

No data available

Relative vapor density

No data available

Relative density

No data available

Specific gravity - VALUE 1

No data available

Water solubility

Miscible

Partition coefficient

No data available

Autoignition temperature

No data available

Decomposition temperature

No data available

Dynamic viscosity - VALUE 1

No data available

Explosive properties

No information available

Oxidizing Properties

No information available

VOC content

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

10.3. Possibility of hazardous reactions**Hazardous polymerization**

None under normal processing.

Hazardous Reactions

None under normal processing.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Bases Cyanides

10.6. Hazardous decomposition products

Nitrogen oxides (NO_x).

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute Toxicity**

<u>Product Information</u>	Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation	No data available.
Eye Contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

The following ATE values have been calculated for the mixture

ATEmix (oral)	100,000.00
ATEmix (dermal)	99,999.00
ATEmix (inhalation-gas)	99,999.00
ATEmix (inhalation-dust/mist)	501.000 mg/l
ATEmix (inhalation-vapor)	189.30 mg/l
<u>Unknown acute toxicity</u>	
0 % of the mixture consists of ingredient(s) of unknown acute toxicity.	
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.	
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.	
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).	
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).	
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).	

Component Information

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Sensitization	No information available.
Mutagenic Effects	No information available.
Carcinogenic effects	
Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

SECTION 12: Ecological information**12.1. Toxicity**

Contains 0 % of components with unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Selenium		LC50: >100mg/L (96h, Oncorhynchus mykiss)	

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Chemical name	Partition coefficient
Nitric acid	-2.3

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

Chemical name	PBT and vPvB assessment
Nitric acid	Not PBT/vPvB
Selenium	PBT assessment does not apply

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from Residues/Unused Products	Dispose of in accordance with federal, state and local regulations.
Contaminated Packaging	Do not reuse empty containers.
Other information	Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG

14.1. UN-No	UN3264
14.2. Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s
14.3. Transport hazard class(es)	8
14.4. Packing group	III
Description	Not applicable
14.5. Marine Pollutant	None
14.6. Special Provisions	None
No information available in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Transport No information available

RID

14.1. UN-No	UN3264
14.2. Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s
14.3. Transport hazard class(es)	8
14.4. Packing group	III
Description	Not applicable
14.5. Environmental hazards	None
14.6. Special Provisions	None

ADR

14.1. UN-No	UN3264
14.2. Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s
14.3. Transport hazard class(es)	8
14.4. Packing group	III
Description	Not applicable
14.5. Environmental hazards	None
14.6. Special Provisions	None

ICAO

14.1. UN-No	UN3264
14.2. Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s
14.3. Hazard Class	8
14.4. Packing Group	III
Description	Not applicable
14.5. Environmental hazards	None
14.6. Special Provisions	None

IATA-DGR

14.1. UN-No	UN3264
14.2. Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s
14.3. Transport hazard class(es)	8
14.4. Packing group	III
Description	Not applicable
14.5. Environmental hazards	None
14.6. Special Provisions	None

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

All of the components in the product are on the following Inventory lists: U.S.A. (TSCA), Europe (EINECS/ELINCS/NLP), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), China (IECSC), Australia (AICS), Korea (ECL).

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Complies
AIIC	Complies
KECL	Complies

Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical safety assessment

No information available

SECTION 16: Other information**Full text of R-phrases referred to under sections 2 and 3**

No information available

Full text of any hazard and/or precautionary statements referred to under Sections 2-15

EUH071 - Corrosive to the respiratory tract
H272 - May intensify fire; oxidizer
H301 - Toxic if swallowed
H314 - Causes severe skin burns and eye damage
H331 - Toxic if inhaled
H373 - May cause damage to organs through prolonged or repeated exposure
H413 - May cause long lasting harmful effects to aquatic life

Revision date 28-Sep-2026

Reason for Revision Not applicable.

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

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet