

AMS 4775, 4776, 4777, 4778, 4779, 4782, BNi 5a, 5b, 6 (PWA 36100), 7, 8, 9, Nitinol-1, Alloy 52 (Solids and V-ST/S Pastes).

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 11/25/2015

Revision date: 1/10/2017

Supersedes: 1.3

Version: 1.4

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

1.1. Product identifier

Product form	: Mixture
Product name	: AMS 4775, 4776, 4777, 4778, 4779, 4782, BNi 5a, 5b, 6 (PWA 36100), 7, 8, 9, Nitinol-1, Alloy 52 (Solids and V-ST/S Pastes).
Product code	: AMS 4775, 4776, 4777, 4778, 4779, 4782, BNi 5a, 5b, 6 (PWA 36100), 7, 8, 9, Nitinol-1, Alloy 52
Type of product	: Alloy

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

1.2.1. Relevant identified uses

Main use category	: Professional use
Industrial/Professional use spec	: For professional use only
Use of the substance/mixture	: Brazing
Function or use category	: Welding, cutting, heating and brazing.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Aimtek, Inc.
 201 Washington Street
 Auburn, MA 01501 - USA
 T 001-508-832-5035 - F 001-508-832-5043
 sales@aimtek.com - www.aimtek.com

1.4. Emergency telephone number

Emergency number : 001-800-424-9300 (CHEMTREC)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Sensitisation — Skin, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity — Repeated exposure, Category 1	H372

Full text of H statements : see section 16

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

GHS08

Signal word (CLP)	: Danger
Hazardous ingredients	: nickel, cobalt
Hazard statements (CLP)	: H317 - May cause an allergic skin reaction H351 - Suspected of causing cancer (if inhaled) H372 - Causes damage to organs through prolonged or repeated exposure
Precautionary statements (CLP)	: P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P260 - Do not breathe dust, fume P264 - Wash hands thoroughly after handling P270 - Do not eat, drink or smoke when using this product

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	P272 - Contaminated work clothing should not be allowed out of the workplace
Child-resistant fastening	: No
Tactile warning	: No

2.3. Other hazards

Adverse physicochemical, human health and environmental effects	: Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. May cause an allergic skin reaction.
Other hazards not contributing to the classification	: None under normal conditions.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
nickel	(CAS No) 7440-02-0 (EC no) 231-111-4 (EC index no) 028-002-00-7	>= 40	Carc. 2, H351 STOT RE 1, H372 Skin Sens. 1, H317
red phosphorus	(CAS No) 7723-14-0 (EC no) 231-768-7 (EC index no) 015-002-00-7	< 20	Flam. Sol. 1, H228 Aquatic Chronic 3, H412
cobalt	(CAS No) 7440-48-4 (EC no) 231-158-0 (EC index no) 027-001-00-9	0.1 - 1	Resp. Sens. 1, H334 Skin Sens. 1, H317 Aquatic Chronic 4, H413

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Get medical advice/attention if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use. Rinse mouth. Do not induce vomiting. If large quantities are ingested, seek medical advice/attention.

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

Symptoms/injuries after inhalation	: May cause respiratory irritation. May cause cancer by inhalation.
Symptoms/injuries after skin contact	: May cause an allergic skin reaction.
Symptoms/injuries after eye contact	: Dust from this product may cause eye irritation.
Symptoms/injuries after ingestion	: May cause irritation to the respiratory tract and to other mucous membranes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Use extinguishing media appropriate for surrounding fire.
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5.2. Special hazards arising from the substance or mixture

Fire hazard	: The product is not flammable.
Explosion hazard	: Product is not explosive.
Reactivity in case of fire	: Not known.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

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5.3. Advice for firefighters

Precautionary measures fire	: No special measures required.
Firefighting instructions	: Use extinguishing media appropriate for surrounding fire.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid release to the environment.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection.
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust, fume.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye or face protection. For further information refer to section 8: "Exposure controls/personal protection". Avoid contact with skin and eyes. Do not breathe Dust, Fumes.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Minimize generation of dust. Carefully shovel or sweep up spilled material and place in suitable container. This material and its container must be disposed of in a safe way, and as per local legislation.
Other information : This material and its container must be disposed of as hazardous waste.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe dust, fume.
Hygiene measures : Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure adequate ventilation, especially in confined areas.
Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.
Incompatible materials : Acetylene, ammonia, ammonium nitrate, aqua regia, dioxane, ethylene oxide, chlorine trifluoride, halogens, hydrogen peroxide, hydrazine, hydrazine mononitrate, hydrazoic acid, hydroxylamine, hydrogen sulfide, performic acid, phosphorus, selenium, sulfur, titanium plus potassium chlorate. Bromates, chlorates and iodates of alkali and alkali earth metals.
Storage area : Store in a well-ventilated place.
Packaging materials : Keep only in original container.

7.3. Specific end use(s)

Other hot work operations with metals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Personal protective equipment : Gloves. Protective goggles. Face shield. Protective clothing.

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Materials for protective clothing	: Wear suitable protective clothing
Hand protection	: Protective gloves
Eye protection	: Wear tight fitting safety glasses or face shield
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Combined gas/dust mask with filter type P1



Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Silver-gray alloy. Metallic wire, rod, strip, paste, powder.
Colour	: Silver.
Odour	: odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: Not applicable
Solubility	: insoluble in water.
Log Pow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: Oxidising solids Not applicable.
Explosive limits	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Acetylene, ammonia, ammonium nitrate, aqua regia, dioxane, ethylene oxide, chlorine trifluoride, halogens, hydrogen peroxide, hydrazine, hydrazine, mononitrate, hydrazoic acid, hydroxylamine, hydrogen sulfide, performic acid, phosphorus, selenium, sulfur, titanium plus potassium chlorate. Bromates, chlorates and iodates of alkali and alkali earth metals.

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10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) Contact dermatitis may result from direct exposure to the skin.
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	: May cause an allergic skin reaction. Long-term exposure to brazing fume, gasses, or dust may contribute to pulmonary irritation or pneumoconiosis.
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Suspected of causing cancer (if inhaled).
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Potential adverse human health effects and symptoms	: May cause cancer.
IARC group	: 2B
Other information	: Likely routes of exposure: inhalation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Ecology - water	: The product does not have any known adverse effect on the tested aquatic organisms.

12.2. Persistence and degradability

AMS 4775, 4776, 4777, 4778, 4779, 4782, BNi 5a, 5b, 6, 7, 8, 9, Nitinol-1, Alloy 52 (Solids and V-ST/S Pastes).

Persistence and degradability	The product is not biodegradable.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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12.4. Mobility in soil

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Ecology - soil	Not established.
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects	: None known.
Additional information	: Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Waste disposal recommendations	: Dispose of contents/container to a hazardous or special waste collection point.

SECTION 14: Transport information

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

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14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data 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

Contains no REACH substances with Annex XVII restrictions

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Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Carc. 2	Carcinogenicity, Category 2
Flam. Sol. 1	Flammable solids, Category 1
Resp. Sens. 1	Sensitisation — Respiratory, Category 1
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H228	Flammable solid
H317	May cause an allergic skin reaction
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

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