

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

SECTION 1: Identification

1.1 Product identifier

Trade name **Nital Solution (5%)**
SDS Identifier **NI2040SS**

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

Relevant identified uses laboratory and analytical use

1.3 Details of the supplier of the safety data sheet

AquaPhoenix Scientific
860 Gitts Run Road
Hanover PA 17331
United States

Telephone: (866) 632-1291
e-mail: info@aquaphoenixsci.com
Website: <https://www.aquaphoenixsci.com/>

1.4 Emergency telephone number

Emergency information service ChemTel Inc.: 1-800-255-3924, +01-813-248-0585

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200, Rev. 2024)

Hazard class	Category	Hazard class and category	Hazard statement
flammable liquid	3	Flam. Liq. 3	H226
substance or mixture corrosive to metals	1	Met. Corr. 1	H290
acute toxicity (oral)	5	Acute Tox. 5	H303
acute toxicity (inhal.)	2	Acute Tox. 2	H330
skin corrosion/irritation	2	Skin Irrit. 2	H315
serious eye damage/eye irritation	1	Eye Dam. 1	H318
carcinogenicity	1A	Carc. 1A	H350
specific target organ toxicity - single exposure	2	STOT SE 2	H371

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Immediate effects can be expected after short-term exposure. The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200, Rev. 2024)

- Signal word **danger**

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

- Pictograms

GHS02, GHS05, GHS06,
GHS08



- Hazard statements

H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H303	May be harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H350	May cause cancer.
H371	May cause damage to organs.

- Precautionary statements

P203	Obtain, read and follow all safety instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234	Keep only in original packaging.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264+P265	Wash hands thoroughly after handling. Do not touch eyes.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or with adequate ventilation.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P284	In case of inadequate ventilation wear respiratory protection.
P301+P317	IF SWALLOWED: Get medical help.
P302+P352	IF ON SKIN: Wash with plenty of water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P354+P338	IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor.
P316	Get emergency medical help immediately.
P318	IF exposed or concerned, get medical advice.
P320	Specific treatment is urgent (see on this label).
P321	Specific treatment (see on this label).
P332+P317	If skin irritation occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
P390	Absorb spillage to prevent material-damage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P406	Store in a corrosion resistant container with a resistant inner liner.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- Hazardous ingredients for labelling

Ethanol, Nitric Acid, methyl alcohol

2.3 Other hazards

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0.1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of $\geq 0.1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Ethanol	CAS No 64-17-5	81.51	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 Carc. 1A / H350	  
Isopropanol	CAS No 67-63-0	8.56	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336	 
methyl alcohol	CAS No 67-56-1	4.076	Flam. Liq. 2 / H225 Acute Tox. 3 / H301 Acute Tox. 3 / H311 Acute Tox. 3 / H331 STOT SE 1 / H370	  
Nitric Acid	CAS No 7697-37-2	3.5	Ox. Liq. 3 / H272 Met. Corr. 1 / H290 Acute Tox. 1 / H330 Skin Corr. 1A / H314 Eye Dam. 1 / H318	  
Water	CAS No 7732-18-5	1.5		
Methyl isobutyl ketone	CAS No 108-10-1	0.855	Flam. Liq. 2 / H225 Acute Tox. 5 / H303 Acute Tox. 4 / H332 Eye Irrit. 2 / H319 Carc. 2 / H351 STOT SE 3 / H335 STOT SE 3 / H336	  

Remarks

For full text of abbreviations: see SECTION 16

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

Medical attention may be necessary if the product gets into the eyes or on the skin.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Substance or mixture corrosive to metals.

Hazardous combustion products

Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Wear impact- and splash-resistant eyewear.

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air. Vapors may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Corrosive conditions

Store in corrosive resistant container with a resistant inner liner.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

Control of the effects

Protect against external exposure, such as

heat, high temperatures, light, UV-radiation/sunlight

- Ventilation requirements

Keep any substance that emits harmful vapors or gases in a place that allows these to be permanently extracted. Use local and general ventilation. Ground/bond container and receiving equipment.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
US	hexone	108-10-1	REL	50 (10 h)	205 (10 h)	75	300				NIOSH REL
US	hexone (methyl isobutyl ketone)	108-10-1	PEL	100	410						29 CFR 1910.10 00
US	methyl isobutyl ketone	108-10-1	TLV®	20		75					ACGIH® 2024
US	methyl isobutyl ketone (hexone)	108-10-1	PEL (CA)	50	205	75	300				Cal/OSH A PEL
US	ethanol	64-17-5	TLV®			1,000					ACGIH® 2024
US	ethyl alcohol	64-17-5	REL	1,000 (10 h)	1,900 (10 h)						NIOSH REL
US	ethyl alcohol (ethanol)	64-17-5	PEL (CA)	1,000	1,900						Cal/OSH A PEL
US	ethyl alcohol (ethanol)	64-17-5	PEL	1,000	1,900						29 CFR 1910.10 00
US	methanol	67-56-1	TLV®	200		250				H	ACGIH® 2024
US	methyl alcohol	67-56-1	PEL	200	260						29 CFR 1910.10 00
US	methyl alcohol	67-56-1	REL	200 (10 h)	260 (10 h)	250	325			H	NIOSH REL
US	methyl alcohol (methanol)	67-56-1	PEL (CA)	200	260	250	325	1,000		H	Cal/OSH A PEL
US	2-propanol	67-63-0	TLV®	200		400					ACGIH® 2024
US	isopropyl alcohol	67-63-0	PEL (CA)	400	980	500	1,225				Cal/OSH A PEL
US	isopropyl alcohol	67-63-0	REL	400 (10 h)	980 (10 h)	500	1,225				NIOSH REL
US	isopropyl alcohol	67-63-0	PEL	400	980						29 CFR 1910.10 00
US	nitric acid	7697-37-2	PEL (CA)	2	5	4	10				Cal/OSH A PEL
US	nitric acid	7697-37-2	REL	2 (10 h)	5 (10 h)	4	10				NIOSH REL
US	nitric acid	7697-37-2	TLV®	2		4					ACGIH® 2024
US	nitric acid	7697-37-2	PEL	2	5						29 CFR 1910.10 00

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Notation

Ceiling-C	ceiling value is a limit value above which exposure should not occur
H	absorbed through the skin
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Biological limit values

Country	Name of agent	Parameter	Notation	Identifier	Value	Source
US	methyl isobutyl ketone	methyl isobutyl ketone		BEI®	1 mg/l	ACGIH® 2024
US	methanol	methanol		BEI®	15 mg/l	ACGIH® 2024
US	2-propanol	acetone		BEI®	40 mg/l	ACGIH® 2024

Relevant DNELs of components

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
methyl alcohol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
methyl alcohol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
methyl alcohol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
methyl alcohol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	acute - local effects
methyl alcohol	67-56-1	DNEL	20 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
methyl alcohol	67-56-1	DNEL	20 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects
Methyl isobutyl ketone	108-10-1	DNEL	83 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Methyl isobutyl ketone	108-10-1	DNEL	208 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
Methyl isobutyl ketone	108-10-1	DNEL	83 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
Methyl isobutyl ketone	108-10-1	DNEL	208 mg/m ³	human, inhalatory	worker (industry)	acute - local effects
Methyl isobutyl ketone	108-10-1	DNEL	11.8 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant PNECs of components

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Methyl isobutyl ketone	108-10-1	PNEC	0.6 mg/l	aquatic organisms	freshwater	short-term (single instance)
Methyl isobutyl ketone	108-10-1	PNEC	0.06 mg/l	aquatic organisms	marine water	short-term (single instance)
Methyl isobutyl ketone	108-10-1	PNEC	27.5 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Relevant PNECs of components						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Methyl isobutyl ketone	108-10-1	PNEC	8.27 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Methyl isobutyl ketone	108-10-1	PNEC	0.83 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Methyl isobutyl ketone	108-10-1	PNEC	1.3 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Recommended: Disposable neoprene gloves, 0.1 - 0.2 mm thick, 15-120 minute breakthrough times. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Product description: See website or catalog for details.

Physical state	liquid
Color	colorless - clear
Odor	like alcohol
Melting point/freezing point	-110 °C
Boiling point or initial boiling point and boiling range	82 °C
Evaporation rate	>1 (water = 1)
Flammability	flammable liquid in accordance with GHS criteria

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Lower and upper explosion limit	3.3 vol% - 18 vol%
Flash point	23.5 °C
Auto-ignition temperature	>260 °C (auto-ignition temperature (liquids and gases))
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	not determined
Solubility(ies)	not determined

Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available
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Vapor pressure	169.3 hPa at 25 °C
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Density and/or relative density

Density	not determined
Relative vapour density	information on this property is not available
Relative density	0.8 – 0.9 (water = 1)

Particle characteristics	not relevant (liquid)
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SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition. Substance or mixture corrosive to metals.

If heated:

Risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200, Rev. 2024)

Acute toxicity

May be harmful if swallowed. Fatal if inhaled.

- Acute toxicity estimate (ATE)

Oral 2,454 mg/kg
Inhalation: vapor 1.401 mg/l/4h

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
methyl alcohol	67-56-1	oral	100 mg/kg
methyl alcohol	67-56-1	dermal	300 mg/kg
methyl alcohol	67-56-1	inhalation: vapor	3 mg/l/4h
Nitric Acid	7697-37-2	inhalation: vapor	0.05 mg/l/4h
Methyl isobutyl ketone	108-10-1	oral	4,570 mg/kg
Methyl isobutyl ketone	108-10-1	inhalation: vapor	11.6 mg/l/4h

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

May cause cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

Name of substance	CAS No	Classification	Number
Isopropanol	67-63-0	3	
Ethanol	64-17-5	1	
Methyl isobutyl ketone	108-10-1	2B	

Legend

1 Carcinogenic to humans
2B Possibly carcinogenic to humans

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Legend

3 Not classifiable as to carcinogenicity in humans

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause damage to organs.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0.1\%$.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of $\geq 0.1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number

DOT	UN 2924
IMDG-Code	UN 2924
ICAO-TI	UN 2924

14.2 UN proper shipping name

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

DOT	Flammable liquid, corrosive, n.o.s.
IMDG-Code	FLAMMABLE LIQUID, CORROSIVE, N.O.S.
ICAO-TI	Flammable liquid, corrosive, n.o.s.
Technical name (hazardous ingredients)	Ethanol, Nitric Acid

14.3 Transport hazard class(es)

DOT	3 (8)
IMDG-Code	3 (8)
ICAO-TI	3 (8)

14.4 Packing group

DOT	III
IMDG-Code	III
ICAO-TI	III

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Other relevant information

Shipping container markings and labels, received from AquaPhoenix, may vary from the above information. Products that are regulated for transport will be packaged by AquaPhoenix as Dangerous Goods in Excepted Quantities according to IATA, US DOT, and IMDG regulations. AquaPhoenix may also elect to ship certain products as UN 3316 Chemical Kit, Hazard Class 9, Packing Group II or III. In case of reshipment, it is the responsibility of the shipper to determine appropriate labels and markings in accordance with applicable transportation regulations.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Particulars in the shipper's declaration	UN2924, Flammable liquid, corrosive, n.o.s., (Ethanol, Nitric Acid, mixture), 3 (8), III
Reportable quantity (RQ)	28,571 lbs (12,971 kg) (Nitric Acid) (methyl alcohol)
Danger label(s)	3+8



Special provisions (SP)	B1, IB3, T7, TP1, TP28
ERG No	132

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	-
Danger label(s)	3+8



Special provisions (SP)	223, 274
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Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, S-C
Stowage category	A

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s)	3+8
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Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	1 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA)

all ingredients are listed (ACTIVE) or exempt from listing

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities

Name of substance	CAS No	Notes	Reportable quantity (pounds)	Threshold planning quantity (pounds)
Nitric Acid	7697-37-2		1,000	1000

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings

Name of substance	CAS No	Remarks	Effective date
Nitric Acid	7697-37-2		1986-12-31
Isopropanol	67-63-0	only persons who manufacture by the strong acid process are subject, supplier notification not required	1986-12-31
methyl alcohol	67-56-1		1986-12-31
Methyl isobutyl ketone	108-10-1		1986-12-31

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
Nitric Acid	7697-37-2		1	1000 (454)
methyl alcohol	67-56-1		3 4	5000 (2270)
Methyl isobutyl ketone	108-10-1		3 4	5000 (2270)

Legend

- 1 "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act
 3 "3" indicates that the source is section 112 of the Clean Air Act
 4 "4" indicates that the source is section 3001 of the Resource Conservation and Recovery Act (RCRA)

Clean Air Act

Name of substance	CAS No	Type of registration	Basis for listing	Threshold quantity (lbs)
Nitric Acid	7697-37-2	Toxic substance	b	15000

Legend

- b On EHS list, vapor pressure 10 mmHg or greater.

Right to Know Hazardous Substance List

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
Nitric Acid	7697-37-2		CO R2
Isopropanol	67-63-0		F3
methyl alcohol	67-56-1		TE F3
Ethanol	64-17-5		CA MU TE F3
Methyl isobutyl ketone	108-10-1		F3 R1

Legend

- CA Carcinogenic
 CO Corrosive
 F3 Flammable - Third Degree
 MU Mutagenic
 R1 Reactive - First Degree
 R2 Reactive - Second Degree
 TE Teratogenic

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Proposition 65 List of chemicals			
Name acc. to inventory	CAS No	Remarks	Type of the toxicity
methanol	67-56-1		developmental
ethanol (ethyl alcohol)	64-17-5	in alcoholic beverages	developmental
methyl isobutyl ketone	108-10-1		cancer
methyl isobutyl ketone (MIBK)	108-10-1		developmental

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	3	material that can be ignited under almost all ambient temperature conditions
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	3	material that can be ignited under almost all ambient temperature conditions
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National inventories

Country	Inventory	Status
AU	AIIC	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Country	Inventory	Status
KR	KECI	all ingredients are listed
MX	INSQ	all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed (ACTIVE)

Legend

AIIC	Australian Inventory of Industrial Chemicals
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
ISHA-ENCS	Inventory of Existing and New Chemical Substances (ISHA-ENCS)
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
ACGIH® 2024	From ACGIH®, 2024 TLVs® and BEIs® Book. Copyright 2024. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement
Acute Tox.	Acute toxicity
ATE	Acute Toxicity Estimate
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Abbr.	Descriptions of used abbreviations
DNEL	Derived No-Effect Level
DOT	Department of Transportation (USA)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ERG No	Emergency Response Guidebook - Number
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
Met. Corr.	Substance or mixture corrosive to metals
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NLP	No-Longer Polymer
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
Ox. Liq.	Oxidizing liquid
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
TLV®	Threshold Limit Values
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Safety Data Sheet

NI2040SS

Version number: 1.4

Date of compilation: 2026-01-06

Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").
Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG).
Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H272	May intensify fire; oxidizer.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H303	May be harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H351	Suspected of causing cancer.
H370	Causes damage to organs.
H371	May cause damage to organs.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.