

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

SECTION 1. IDENTIFICATION

Product name : Nitric acid concentrate

Number : 000000021906

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or**
: **+1-703-527-3887**
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : liquid

Color : colourless

Odor : odourless

Classification of the substance or mixture

Classification of the substance or mixture : Corrosive to metals, Category 1
Skin corrosion, Category 1B
Serious eye damage, Category 1

GHS Label elements, including precautionary statements

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

Symbol(s)

:



Signal word

: Danger

Hazard statements

: May be corrosive to metals.
Causes severe skin burns and eye damage.

Precautionary statements

: **Prevention:**
Keep only in original container.
Wash skin thoroughly after handling.
Wear protective gloves/ protective clothing/ eye protection/ face protection.**Response:**

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/ doctor.

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Storage:

Store locked up.

Store in corrosive resistant container with a resistant inner liner.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTSFormula : HNO₃

Chemical nature : Mixture

Chemical name	CAS-No.	Concentration
Water	7732-18-5	>=70.00 - <90.00 %
Nitric acid	7697-37-2	>=10.00 - <20.00 %

SECTION 4. FIRST AID MEASURES

- General advice : First aider needs to protect himself. Move out of dangerous area. Immediately take off contaminated clothing and rinse body with plenty of water.
- Inhalation : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician immediately.
- Skin contact : Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician if irritation develops or persists.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Protect unharmed eye. Call a physician immediately.
- Ingestion : Rinse mouth with water. Do NOT induce vomiting. Call a physician immediately.

Notes to physician

Most important symptoms/effects, acute and : No information available.

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

delayed
Indication of immediate : Treat symptomatically.
medical attention and
special treatment needed, if
necessary

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry powder
- Specific hazards during firefighting : Some risk may be expected of corrosive and toxic decomposition products.
Fire may cause evolution of:
Nitrogen oxides (NO_x)
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.
No unprotected exposed skin areas.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
The product itself does not burn.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.
Wear personal protective equipment. Unprotected persons must be kept away.
Ensure adequate ventilation.
Do not breathe vapours or spray mist.
Do not get in eyes, on skin, or on clothing.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
Discharge into the environment must be avoided.
Do not flush into surface water or sanitary sewer system.
Prevent product from entering drains.
Collect contaminated fire extinguishing water separately. This

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

must not be discharged into drains.

Methods and materials for
containment and cleaning
up : Use neutralizing agents.
Soak up with inert absorbent material.
Sweep up and shovel into suitable containers for disposal.
Dispose of in accordance with local regulations.

SECTION 7. HANDLING AND STORAGE**Handling**

Precautions for safe
handling : Wear personal protective equipment.
Use only in well-ventilated areas.
Do not breathe vapours or spray mist.
Do not get in eyes, on skin, or on clothing.

Advice on protection against
fire and explosion : Normal measures for preventive fire protection.

Storage

Conditions for safe storage,
including any
incompatibilities : Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated
place.
Store away from incompatible substances.
Protect cylinders from physical damage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to
the workstation location.
Legal requirements are to be considered in regard of the
selection, use and care of personal protective equipment.
Do not breathe vapours or spray mist.
Do not get in eyes, on skin, or on clothing.

Engineering measures : Use with local exhaust ventilation.

Eye protection : Safety goggles
Face-shield

Hand protection : Impervious gloves

Nitric acid concentrate
32042-1EA

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

Gloves must be inspected prior to use.
Replace when worn.

- Skin and body protection : Wear suitable protective equipment.
Wear as appropriate:
acid-proof protective clothing
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hygiene measures : Take off all contaminated clothing immediately.
Separate rooms are required for washing, showering and changing clothes.
Keep working clothes separately.
Remove and wash contaminated clothing before re-use.
Wash hands before breaks and at the end of workday.
When using do not eat or drink.

Exposure Guidelines

Components	CAS-No.	Value	Control parameters	Update	Basis
Nitric acid	7697-37-2	STEL : Short term exposure limit	(4 ppm)	2008	ACGIH:US. ACGIH Threshold Limit Values, as amended
Nitric acid	7697-37-2	TWA : Time weighted average	(2 ppm)	2008	ACGIH:US. ACGIH Threshold Limit Values, as amended
Nitric acid	7697-37-2	REL : Recommended exposure limit (REL):	5 mg/m3 (2 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Nitric acid	7697-37-2	STEL : Short term exposure limit	10 mg/m3 (4 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

Nitric acid	7697-37-2	PEL : Permissible exposure limit	5 mg/m3 (2 ppm)	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Nitric acid	7697-37-2	STEL : Short term exposure limit	10 mg/m3 (4 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Nitric acid	7697-37-2	TWA : Time weighted average	5 mg/m3 (2 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Color	: colourless
Odor	: odourless
Odor threshold	: Note: No data available
pH	: Note: acidic
Melting point/range	: Note: No data available
Boiling point/boiling range	: ca. 100 °C
Flash point	: Note: Not applicable
Evaporation rate	: Note: No data available

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

Flammability	: Not applicable
Lower explosion limit	: Note: Not applicable
Upper explosion limit	: Note: Not applicable
Vapor pressure	: Note: similar to water
Vapor density	: Note: No data available
Density	: 1.065 g/cm ³ at 20 °C
Water solubility	: Note: completely miscible
Partition coefficient: n-octanol/water	: Note: No data available
Ignition temperature	: Note: Not applicable
Auto-ignition temperature	: Note: not auto-flammable
Decomposition temperature	: Note: No decomposition if used as directed.
Viscosity, kinematic	: Note: No data available
Molecular weight	: 63.01 g/mol
Bulk density	: Note: Not applicable
Corrosivity	: Note: Corrosive to metals

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Gives off hydrogen by reaction with metals. Hazardous polymerisation does not occur.
Conditions to avoid	: Protect from contamination. Keep away from reducing agents. Protect from extreme heat and cold.
Incompatible materials	: Strong bases Metals
Hazardous decomposition products	: nitrogen oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: Note: No data available Toxicity is determined by the corrosivity of the product.
Acute inhalation toxicity	: LC50: 2500 ppm, Aerosol Exposure time: 1 h Species: Rat Method: OECD Test Guideline 403 Note: anhydrous substance : Acute toxicity estimate: 25 mg/l , vapour Exposure time: 4 h Method: Calculation method
Acute dermal toxicity	: Note: No data available Toxicity is determined by the corrosivity of the product.

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

Skin irritation	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Eye irritation	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Sensitisation	: Note: No data available
Repeated dose toxicity	: Note: Not classified due to data which are conclusive although insufficient for classification.
Genotoxicity in vitro	: Note: Not classified due to data which are conclusive although insufficient for classification.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to fish	: Note: No data available
Toxicity to daphnia and other aquatic invertebrates	: Note: No data available
Toxicity to algae	: Note: No data available

Elimination information (persistence and degradability)

Biodegradability	: Note: The methods for determining biodegradability are not applicable to inorganic substances.
------------------	--

Further information on ecology

Additional ecological information	: The methods for determining biodegradability are not applicable to inorganic substances. Neutralisation will reduce ecotoxic effects.
-----------------------------------	--

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT	UN/ID No.	: UN 2031
	Proper shipping name	: Nitric acid
	Class	: 8
	Packing group	: II
	Hazard Labels	: 8
IATA	UN/ID No.	: UN 2031
	Description of the goods	: Nitric acid
	Class	: 8
	Packaging group	: II
	Hazard Labels	: 8
	Packing instruction (cargo aircraft)	: 855
	Packing instruction (passenger aircraft)	: 851
	Packing instruction (passenger aircraft)	: Y840
IMDG	UN/ID No.	: UN 2031
	Description of the goods	: Nitric acid
	Class	: 8
	Packaging group	: II
	Hazard Labels	: 8
	EmS Number	: F-A, S-B
	Marine pollutant	: no
IMDG Code segregation group (SGG1) – ACIDS,		

SECTION 15. REGULATORY INFORMATION**Inventories**

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

US. Toxic Substances Control Act	: On TSCA Inventory
Australia. Industrial Chemicals Act (AICC), as amended	: On the inventory, or in compliance with the inventory
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)	: All components of this product are on the Canadian DSL
Japan. Kashin-Hou Law List	: On the inventory, or in compliance with the inventory
Korea. Existing Chemicals Inventory (KECI)	: On the inventory, or in compliance with the inventory
Philippines. Inventory of Chemicals and Chemical Substances (PICCS)	: On the inventory, or in compliance with the inventory
China. Inventory of Existing Chemical Substances (IECSC)	: On the inventory, or in compliance with the inventory
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	: On the inventory, or in compliance with the inventory

National regulatory information

US. EPA CERCLA Hazardous Substances (40 CFR 302) : The following component(s) of this product is/are subject to release reporting under 40 CFR 302 when release exceeds the Reportable Quantity (RQ):

Reportable quantity: 1000 lbs
: Nitric acid 7697-37-2

SARA 302 Components : The following components are subject to reporting levels established by SARA Title III, Section 302:
: Nitric acid 7697-37-2

SARA 313 Components : The following components are subject to reporting levels

Nitric acid concentrate**32042-1EA**

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

established by SARA Title III, Section 313:
: Nitric acid 7697-37-2

SARA 311/312 Hazards : Acute Health Hazard

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts RTK : Nitric acid 7697-37-2

New Jersey RTK : Nitric acid 7697-37-2

Pennsylvania RTK : Nitric acid 7697-37-2

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 3	3
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

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. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous

Nitric acid concentrate

32042-1EA

Version 1.1

Revision Date 02/25/2022

Print Date 05/12/2023

versions.

Previous Issue Date: 02/03/2017

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group