



SAFETY DATA SHEET

1. Identification

Product identifier	NITRIC ACID 42 BE
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	BRENNTAG CANADA INC
Address	43 Jutland Rd. Toronto, ON M8Z 2G6 Canada
Telephone	416-259-8231
Website	http://www.brenntag.com/canada/en/
E-mail	RegulatoryAffairs@Brenntag.ca
Emergency phone number	1-855-273-6824

2. Hazard(s) identification

Physical hazards	Oxidising liquids	Category 2
Health hazards	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity following repeated exposure	Category 2
	Environmental hazards	Not classified.

Label elements



Signal word	Danger
Hazard statements	May intensify fire; oxidiser. Causes severe skin burns and eye damage. Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Do not breathe mist or vapour. Wash 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): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep 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 CENTRE/doctor. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish.

Storage Store locked up.

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

Other hazards None known.

Supplemental information 67.18 % of the mixture consists of component(s) of unknown acute oral toxicity. 67.18 % of the mixture consists of component(s) of unknown acute dermal toxicity. 67.18 % of the mixture consists of component(s) of unknown acute inhalation toxicity. 67.18 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 67.18 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Nitric acid		7697-37-2	67.18
Other components below reportable levels			32.82

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Immediately flush skin with plenty of water. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. For minor skin contact, avoid spreading material on unaffected skin. Wash contaminated clothing before reuse. Wash clothing separately before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

Ingestion

Call a physician or poison control centre immediately. Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms/effects, acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

Take off all contaminated clothing immediately. Contact with combustible material may cause fire. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Greatly increases the burning rate of combustible materials. Containers may explode when heated. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

May intensify fire; oxidiser. Contact with combustible material may cause fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep away from clothing and other combustible materials. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Ventilate the contaminated area. Wear appropriate protective equipment and clothing during clean-up.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. For waste disposal, see section 13 of the SDS.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Keep away from heat. Take any precaution to avoid mixing with combustibles. Keep away from clothing and other combustible materials. Do not breathe mist or vapour. Do not get in eyes, on skin, or on clothing. Do not get this material on clothing. Avoid prolonged exposure. Do not use in areas without adequate ventilation. Wear appropriate personal protective equipment. Wash thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Do not store near combustible materials. Store away from incompatible materials (see Section 10 of the SDS). Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Recommendations listed in this section indicate the type of equipment, which will provide protection against overexposure to this product. Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
NITRIC ACID (CAS 7697-37-2)	STEL	4 ppm
	TWA	2 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
NITRIC ACID (CAS 7697-37-2)	STEL	10 mg/m3
	TWA	4 ppm
		5.2 mg/m3
		2 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
NITRIC ACID (CAS 7697-37-2)	STEL	4 ppm
	TWA	2 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
NITRIC ACID (CAS 7697-37-2)	STEL	4 ppm
	TWA	2 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
NITRIC ACID (CAS 7697-37-2)	STEL	4 ppm
	TWA	2 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Type	Value
NITRIC ACID (CAS 7697-37-2)	STEL	10 mg/m3
	TWA	4 ppm
		5.2 mg/m3
		2 ppm

Consult provincial or territorial exposure values, as may apply.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

The following are recommendations only for the use of PPE. These recommendations cannot anticipate the variety of workplaces where the product will be used, nor how the product will be used in a variety of applications and processes. In determining appropriate PPE and engineering controls, it is the duty of the employer / user to evaluate their use of this product in accordance with the requirements of the local jurisdiction, and, if necessary, in conjunction with a professional industrial hygienist.

Eye/face protection	Chemical goggles and face shield are recommended. Do not get in eyes.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.
Other	Do not get this material in contact with skin. Wear chemical protective equipment that is specifically recommended by the manufacturer. Use of an impervious apron is recommended. It may provide little or no thermal protection.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Wear suitable acid gas respirator with full face shield where required.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations	Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly. When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
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9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Colour	Not available.
Odour	PUNGENT
Odour threshold	Not available.
pH	1.0
Melting point/freezing point	-31.67 °C (-25 °F)
Initial boiling point and boiling range	121.11 °C (250 °F)
Flash point	Not available.
Evaporation rate	Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapour pressure Not available.

Vapour density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 11.70 lbs/gal

Explosive properties Not explosive.

Oxidising properties May intensify fire; oxidiser.

Percent volatile 32.82 % estimated

Specific gravity 1.4

10. Stability and reactivity

Reactivity Greatly increases the burning rate of combustible materials.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerisation does not occur.

Conditions to avoid Heat. Contact with incompatible materials.

Incompatible materials Combustible material. Reducing Agents. Alcohols.

Hazardous decomposition products Nitrogen oxides (NOx).

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation. May cause irritation to the respiratory system.

Skin contact Causes severe skin burns.

Eye contact Causes serious eye damage.

Ingestion Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Causes burns. Not known.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitisation

Respiratory sensitisation	Not a respiratory sensitizer.
Skin sensitisation	This product is not expected to cause skin sensitisation.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not available.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

Transport information on packaging may be different from that listed. Transportation information on packaging may be different from that listed.

DOT

UN number	UN2031
UN proper shipping name	NITRIC ACID
Transport hazard class(es)	
Class	8
Subsidiary risk	5.1
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ERG number	157

IATA

UN number	UN2031
UN proper shipping name	NITRIC ACID
Transport hazard class(es)	
Class	8
Subsidiary risk	5.1
Packing group	II

Environmental hazards No.
ERG Code 157
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN2031
UN proper shipping name NITRIC ACID other than red fuming, with at least 65% but with not more than 70% nitric acid solution (NITRIC ACID)
Transport hazard class(es)
Class 8
Subsidiary risk 5.1
Packing group II
Environmental hazards
Marine pollutant No.
EmS F-A, S-Q
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

DOT



IATA; IMDG; TDG



TDG

UN number UN2031
UN proper shipping name Nitric acid
Transport hazard class(es)
Class 8
Subsidiary risk 5.1
Packing group II
Environmental hazards Not available.
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information

Canadian regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada DSL Inventory: Registration Status

Nitric acid (CAS 7697-37-2) Listed

Canada Environmental Emergency Regulations Schedule 1: Listed Substance

Nitric acid (CAS 7697-37-2) Listed

Canada NPRI (Supplier Notification Required): Listed substance

Nitric acid (CAS 7697-37-2) Listed

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Nitric acid (CAS 7697-37-2) Listed.

SARA 304 Emergency release notification

Nitric acid (CAS 7697-37-2) 1000 lbs

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Nitric acid	7697-37-2	1000	1000		

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Oxidizer (liquid, solid, or gas)
 Skin corrosion or irritation
 Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Nitric acid	7697-37-2	67.18

Other federal regulations

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Not listed.

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated.

DEA Exempt Chemical Mixtures Code Number

Not regulated.

US state regulations

US. California Proposition 65

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Nitric acid (CAS 7697-37-2)

California Proposition 65

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Nitric acid (CAS 7697-37-2)

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Toxic Chemical Substances (TCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 28-May-2018

Version No. 01

Disclaimer While Brenntag believes the information contained herein to be accurate, Brenntag makes no representation or warranty, express or implied, regarding, and assumes no liability for, the accuracy or completeness of the information. The Buyer assumes all responsibility for handling, using and/or reselling the Product in accordance with applicable federal, state, and local law. This SDS shall not in any way limit or preclude the operation and effect of any of the provisions of Brenntag's terms and conditions of sale.

Revision information Physical & Chemical Properties: Multiple Properties

Pays ou région	Nom de l'inventaire	En stock (Oui/Non)*
Canada	Liste intérieure des substances (LIS)	Oui
Canada	Liste extérieure des substances (LES)	Non
Chine	Inventaire des substances chimiques existantes en Chine (IECSC)	Oui
Europe	Inventaire européen des substances chimiques commerciales existantes (EINECS)	Oui
Europe	Liste européenne des substances chimiques notifiées (ELINCS)	Non
Japon	Inventaire des substances chimiques existantes et nouvelles (ENCS)	Oui
Corée	Liste des produits chimiques existants (ECL)	Oui
Nouvelle-Zélande	Inventaire de la Nouvelle-Zélande	Oui
Philippines	Inventaire philippin des produits et substances chimiques (PICCS)	Oui
Taiwan	Taiwan Toxic Chemical Substances (TCS)	Oui
États-Unis et Porto Rico	Inventaire du TSCA (Toxic Substances Controls Act - Loi réglementant les substances toxiques)	Oui

*La réponse « Oui » indique que tous les composants du produit sont conformes aux exigences d'entreposage du pays ayant compétence. Un « Non » indique qu'un ou plusieurs composant(s) du produit n'est/ne sont pas inscrit(s) ou exempt(s) d'une inscription sur l'inventaire administré par le(s) pays ayant compétence.

16. Autres informations

Date de publication 28-Mai-2018

Version n° 01

Avis de non-responsabilité Bien que Brenntag croit que les renseignements contenus dans le présent document soient exacts, Brenntag n'offre aucune garantie, expresse ou implicite en ce qui a trait à l'exactitude ou à l'exhaustivité de tels renseignements, et n'en assume responsabilité. L'acheteur assume toute responsabilité pour la manipulation, l'utilisation et la revente du produit conformément aux lois fédérales, provinciales et municipales. La présente fiche signalétique ne doit en aucun cas limiter ni exclure aucune des clauses des modalités de vente de Brenntag.

Informations relatives à la révision Propriétés physiques et chimiques : Propriétés multiples