



Be Right™

SAFETY DATA SHEET

Issue Date 27-04-2017

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Version 1.3

1. IDENTIFICATION

Product identifier

Product Name Organic Acids B

Other means of identification

Product Code(s) TNT872B

Safety data sheet number M02651

UN/ID no UN3316

Recommended use of the chemical and restrictions on use

Recommended Use Analytical reagent

Uses advised against Consumer use

Details of the supplier of the safety data sheet

Initial Supplier Identifier

Hach Sales & Service LP. 3020 Gore Road, London, Ontario N5V 4T7 Canada Tel: 1-800-665-7635

Manufacturer Address

Hach Company, P.O. Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300
CANUTEC 613-992-4624

2. HAZARD IDENTIFICATION

Classification

Skin sensitization	Category 1
Carcinogenicity	Category 2

Label elements

Signal word - Warning

Hazard statements

H317 - May cause an allergic skin reaction
H351 - Suspected of causing cancer

**Precautionary Statements**

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P272 - Contaminated work clothing should not be allowed out of the workplace
 P280 - Wear protective gloves, protective clothing, eye protection, and face protection
 P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
 P362 + P364 - Take off contaminated clothing and wash it before reuse
 P501 - Dispose of contents/ container to an approved waste disposal plant
 P201 - Obtain special instructions before use
 P308 + P313 - IF exposed or concerned: Get medical advice/attention
 P405 - Store locked up

Unknown Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.
 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

Other Hazards Known

May be harmful if swallowed. Causes mild skin irritation. Toxic to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Family Mixture.
Chemical nature Aqueous solution of organic salts.

Chemical name	Synonyms	CAS No	Percent Range	CBI Protection	Units	HMIRA #
Hydroxylamine, hydrochloride	No information available	5470-11-1	1 - 5%	-	g	-

4. FIRST AID MEASURES

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a physician.

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

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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

Unsuitable Extinguishing Media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous combustion products This material will not burn.

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

WHMIS Notice Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Legend See section 16 for terms and abbreviations

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Individual protection measures, such as personal protective equipment

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hand Protection Wear suitable gloves. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374-1:2016.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear suitable protective clothing.

General Hygiene Considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Color	colorless
Appearance	aqueous solution	Odor threshold	No data available
Odor	Odorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Molecular weight	No data available	
pH	4	@ 20 °C
Melting point/freezing point	~ -2 °C / 28.4 °F	
Boiling point / boiling range	~ 101 °C / 213.8 °F	
Evaporation rate	2.98 (water = 1)	
Vapor pressure	0.3 mm Hg / 0.04 kPa at 20 °C / 68 °F	
Relative vapor density	0.62	
Specific gravity (water = 1 / air = 1)	1.02	
Partition Coefficient (n-octanol/water)	Not applicable	
Soil Organic Carbon-Water Partition Coefficient	Not applicable	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	No data available	
Kinematic viscosity	No data available	

Solubility(ies)**Water solubility**

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

<u>Chemical Name</u>	<u>Solubility classification</u>	<u>Solubility</u>	<u>Solubility Temperature</u>
None reported	No information available	No data available	No information available

Other information**Metal Corrosivity**

Steel Corrosion Rate	No data available
Aluminum Corrosion Rate	No data available

Volatile Organic Compounds (VOC) Content

<u>Chemical name</u>	<u>CAS No</u>	<u>Volatile organic compounds (VOC) content</u>	<u>CAA (Clean Air Act)</u>
Hydroxylamine, hydrochloride	5470-11-1	No data available	-

Explosive properties

Upper explosion limit	No data available
Lower explosion limit	No data available

Flammable properties

Flash point No data available

Flammability Limit in Air

Upper flammability limit: No data available

Lower flammability limit: No data available

Oxidizing properties

No data available.

Bulk density

No data available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None

Sensitivity to Static Discharge None.

Possibility of hazardous reactions

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization

None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Incompatible materials Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

Hydrogen chloride. Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation No known effect based on information supplied.

Eye contact No known effect based on information supplied.

Skin contact May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Ingestion No known effect based on information supplied.

Symptoms Itching. Rashes. Hives.

Acute toxicity

Based on available data, the classification criteria are not met

Product Acute Toxicity Data

No data available.

Ingredient Acute Toxicity Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Hydroxylamine, hydrochloride (1 - 5%) CAS#: 5470-11-1	Rat LD ₅₀	141 mg/kg	None reported	None reported	Vendor SDS

Dermal Exposure Route**Unknown Acute Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity.

- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

Acute Toxicity Estimations (ATE)

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	2,960.90
ATEmix (dermal)	23,099.50
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product Skin Corrosion/Irritation Data

No data available.

Ingredient Skin Corrosion/Irritation Data

No data available.

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Product Serious Eye Damage/Eye Irritation Data

No data available.

Ingredient Eye Damage/Eye Irritation Data

No data available.

Respiratory or skin sensitization

May cause sensitization by skin contact.

Product Sensitization Data

No data available.

Ingredient Sensitization Data

No data available.

STOT - single exposure

Based on available data, the classification criteria are not met.

Product Specific Target Organ Toxicity Single Exposure Data

No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Product Specific Target Organ Toxicity Repeat Dose Data

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Hydroxylamine, hydrochloride (1 - 5%) CAS#: 5470-11-1	Rat LD _{Lo}	2478 mg/kg	6 days	Behavioral Food intake Blood Changes in blood leukocyte count Nutritional and Gross Metabolic Weight loss or decreased weight gain	NIOSH (National Institute for Occupational Safety and Health)

Carcinogenicity

Classification based on data available for ingredients. Contains a known or suspected carcinogen.

Product Carcinogenicity Data

No data available.

Ingredient Carcinogenicity Data

No data available.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Hydroxylamine, hydrochloride	5470-11-1	-	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of Labor)	Does not apply

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Product Germ Cell Mutagenicity invitro Data

No data available.

Ingredient Germ Cell Mutagenicity invitro Data

No data available.

Product Germ Cell Mutagenicity *in vivo* Data

No data available.

Ingredient Germ Cell Mutagenicity *in vivo* Data

No data available.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Product Reproductive Toxicity Data

No data available.

Ingredient Reproductive Toxicity Data

No data available.

Aspiration hazard

Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Based on available data, the classification criteria are not met

Unknown Acute Toxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Product Ecological Data

Aquatic Acute Toxicity

No data available.

Aquatic Chronic Toxicity

No data available.

Ingredient Ecological Data

Aquatic Acute Toxicity

No data available.

Aquatic Chronic Toxicity

No data available.

Persistence and degradability

Product Biodegradability Data

No data available.

Product Bioaccumulation Data

No data available.

Partition Coefficient (n-octanol/water)

Not applicable

Mobility

Soil Organic Carbon-Water Partition Coefficient

Not applicable

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products	Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.
Contaminated packaging	Do not reuse empty containers.

14. TRANSPORT INFORMATION

Transport Canada

UN/ID no	UN3316
Proper shipping name	CHEMICAL KIT
Transport hazard class(es)	9
Description	UN3316, CHEMICAL KIT, 9, Marine pollutant
Emergency Response Guide Number	171

TDG

UN/ID no	UN3316
Proper shipping name	CHEMICAL KIT
Transport hazard class(es)	9
Description	UN3316, CHEMICAL KIT, 9

IATA

UN number or ID number	UN3316
Proper shipping name	Chemical kit
Transport hazard class(es)	9
Packing group	II
ERG Code	9L
Description	UN3316, Chemical kit, 9

IMDG

UN number or ID number	UN3316
Proper shipping name	CHEMICAL KIT
Transport hazard class(es)	9
EmS-No	F-A, S-P
Special precautions for user	251, 340
Marine pollutant	No
Description	UN3316, CHEMICAL KIT, 9, Marine pollutant

Note: No special precautions necessary.

Additional information

This product forms part of a kit. Information in this section relates to the kit as a whole. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

Regulatory information

National Inventories

DSL/NDSL Complies

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

TSCA Complies
EINECS/ELINCS Complies
ENCS Complies

IECSC	Complies
KECL - Existing substances	Complies
PICCS	Complies
TCSI	Complies
AICS	Complies
NZIoC	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
TCSI - Taiwan Chemical Substances Inventory
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

Canada - CEPA - Mercury Containing Products

None

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

Special Comments

None

NFPA and HMIS Classifications

NFPA	Health hazards - 2	Flammability - 0	Instability - 0	Physical and chemical properties -
HMIS	Health hazards - 2 - *	Flammability - 0	Physical hazards - 0	Personal protection - X

Key or legend to abbreviations and acronyms used in the safety data sheet

NIOSH IDLH	<i>Immediately Dangerous to Life or Health</i>
ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
NDF	<i>no data</i>

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
MAC	Maximum Allowable Concentration	Ceiling	Ceiling Limit Value
X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state

regulations.

SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

Prepared By Hach Product Compliance Department

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Revision Note

None

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations. THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. HACH COMPANY©2022

End of Safety Data Sheet