

Material Safety Data Sheet**Buffer Solution, pH 10.0**

ACC# 92329

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**MSDS Name:** Buffer Solution, pH 10.0**Catalog Numbers:** AC613080000, AC613085000**Synonyms:** None Known.**Company Identification:**

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01**For emergencies in the US, call CHEMTREC: 800-424-9300****SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

CAS#	Chemical Name	Percent	EINECS/ELINCS
1310-73-2	Sodium hydroxide	<1.0	215-185-5
1303-96-4	Borates, tetra, sodium salts, decahydrate	0.48	unlisted
7732-18-5	Water	Balance	231-791-2

Hazard Symbols: None listed.**Risk Phrases:** None listed.**SECTION 3 - HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW****Appearance:** clear colorless liquid. **CAUTION!** May cause eye and skin irritation.

May cause respiratory and digestive tract irritation.

Target Organs: No data found.**Potential Health Effects****Eye:** May cause eye irritation.**Skin:** May cause skin irritation.**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea.**Inhalation:** May cause respiratory tract irritation.**Chronic:** Prolonged or repeated skin contact may cause dermatitis. Sodium borate--prolonged inhalation may cause bronchitis or laryngitis. Repeated ingestion may cause anorexia, and irritation of the digestive tract.**SECTION 4 - FIRST AID MEASURES****Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.**Skin:** Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Notes to Physician: Treat symptomatically and supportively.

SECTION 5 - FIRE FIGHTING MEASURES

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

SECTION 7 - HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA Final PELs
Sodium hydroxide	C 2 mg/m ³	10 mg/m ³ IDLH ₂	mg/m ³ TWA
Borates, tetra, sodium salts, decahydrate	1 mg/m ³ TWA (anhydrous); 5 mg/m ³ TWA (decahydrate); 1 mg/m ³ TWA (pentahydrate)	5 mg/m ³ TWA	none listed
Water	none listed	none listed	none listed

OSHA Vacated PELs: Sodium hydroxide: C 2 mg/m³ Borates, tetra, sodium salts, decahydrate: 10 mg/m³ TWA Water: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR §1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance: clear colorless

Odor: odorless

pH: 10.0

Vapor Pressure: 14 mm Hg @ 20 deg C

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: > 100 deg C

Freezing/Melting Point: < 0 deg C

Decomposition Temperature: Not available.

Solubility: Soluble.

Specific Gravity/Density: 1.0

Molecular Formula: Solution

Molecular Weight: Not available.

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials.

Incompatibilities with Other Materials: Water Reactive Substances (e.g. Sulfuric Acid, Sodium Metal, Potassium Metal, Calcium Carbide)..

Hazardous Decomposition Products: Irritating and toxic fumes and gases, sodium oxide.

Hazardous Polymerization: Has not been reported

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 1310-73-2: WB4900000

CAS# 1303-96-4: VZ2275000

CAS# 7732-18-5: ZC0110000

LD50/LC50:

CAS# 1310-73-2:

Draize test, rabbit, eye: 400 ug Mild;

Draize test, rabbit, eye: 1% Severe;

Draize test, rabbit, eye: 50 ug/24H Severe;

Draize test, rabbit, eye: 1 mg/24H Severe;

Draize test, rabbit, skin: 500 mg/24H Severe;

CAS# 1303-96-4:

Oral, mouse: LD50 = 2 gm/kg;

Oral, rat: LD50 = 2660 mg/kg;

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg;

Carcinogenicity:

CAS# 1310-73-2: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. CAS# 1303-96-4:

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. CAS# 7732-18-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Neurotoxicity: No information available.

Mutagenicity: No information available.

Other Studies: No data available.

SECTION 12 - ECOLOGICAL INFORMATION

No information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

SECTION 14 - TRANSPORT INFORMATION

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	No information available.				No information Available.

Hazard Class:

UN Number:

Packing Group:

SECTION 15 - REGULATORY INFORMATION

US FEDERAL

TSCA

CAS# 1310-73-2 is listed on the TSCA inventory.

CAS# 1303-96-4 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA**Section 302 (RQ)**

CAS# 1310-73-2: final RQ = 1000 pounds (454 kg)

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 1310-73-2: acute, reactive. CAS # 1303-96-4: chronic.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

CAS# 1310-73-2 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 1310-73-2 can be found on the following state right to know lists:

California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

CAS# 1303-96-4 can be found on the following state right to know lists:

California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations**European Labeling in Accordance with EC Directives****Hazard Symbols:**

Not available.

Risk Phrases:**Safety Phrases:**

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 1310-73-2: 1

CAS# 1303-96-4: 1

CAS# 7732-18-5: No information available.

Canada - DSL/NDL

CAS# 1310-73-2 is listed on Canada's DSL List.

CAS# 1303-96-4 is listed on Canada's DSL List.

CAS# 7732-18-5 is listed on Canada's DSL List.

Canada - WHMIS

WHMIS: Not available.

Canadian Ingredient Disclosure List

CAS# 1310-73-2 is listed on the Canadian Ingredient Disclosure List.

CAS# 1303-96-4 is listed on the Canadian Ingredient Disclosure List.

Exposure Limits

CAS# 1310-73-2: OEL-AUSTRALIA:TWA 2 mg/m³ OEL-BELGIUM:STEL 2 mg/m³

OEL-DENMARK:TWA 2 mg/m³ OEL-FINLAND:TWA 2 mg/m³ OEL-FRANCE:TWA 2 mg/m³ OEL-GERMANY:TWA 2 mg/m³ OEL-JAPAN:STEL 2 mg/m³ OEL-THE NETHERLANDS:TWA 2 mg/m³ OEL-THE PHILIPPINES:TWA 2 mg/m³ OEL-SWEDEN:TWA 2 mg/m³ OEL-SWITZERLAND:TWA 2 mg/m³;STEL 4 mg/m³ OEL-THAILAND:TWA 2 mg/m³ OEL-TURKEY:TWA 2 mg/m³ OEL-UNITED KINGDOM:TWA 2 mg/m³;STEL 2 mg/m³ OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV
CAS# 1303-96-4: OEL-AUSTRALIA:TWA 5 mg/m³ OEL-BELGIUM:TWA 5 mg/m³ OEL-DENMARK:TWA 5 mg/m³ OEL-FRANCE:TWA 5 mg/m³ OEL-THE NETHERLANDS:TWA 5 mg/m³ OEL-SWEDEN:TWA 2 mg/m³;STEL 5 mg/m³;Skin OEL-SWITZERLAND:TWA 5 mg/m³ OEL-UNITED KINGDOM:TWA 5 mg/m³ OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 2/27/2002
Revision #1 Date: 2/27/2002

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.