

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product identifier used on the label: Breakthru

Other means of Identification: 6161

Recommended use of the chemical and restrictions on use: Disinfectant/Cleaner/Deoderant. Sanitizer. For professional use only.

Manufacturer/Supplier: Nuance Solutions
Address: 1140 E 103rd St.
Chicago, IL 60628, United States

Telephone: +1 773-785-2300
Fax: 888 557 3331

24 Hr. Emergency Tel. #: INFOTRAC 1-800-535-5053 (North America) 011-1-352-323-3500 (International Collect)

SECTION 2 - HAZARDS IDENTIFICATION

Classification of the chemical:

Skin corrosion/irritation – Category 1

Serious eye damage/eye irritation – Category 1

Label elements:

Signal Word **Danger**

Hazard statement(s)

Causes severe skin burns and eye damage

Precautionary statement(s)

Avoid breathing dust/fume/gas/mist/vapours/spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Dispose of contents/container according to local regulations

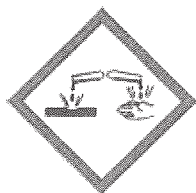
If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs get medical advice/attention. Wash contaminated clothing before reuse.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician.

Hazard pictogram(s)



Other hazards not otherwise classified: None Known

Unknown Acute Toxicity: 1.6% of the mixture consists of ingredient(s) of unknown toxicity

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name, Common Name & Synonyms:	CAS #	Concentration %
Tetrapotassium pyrophosphate	7320-34-5	5-10
Tetrasodium EDTA	64-02-8	1-5
Ethyl Alcohol	64-17-5	<1
Nonoxynol	9016-45-9	1-5
Sodium hydroxide	1310-73-2	1-5
D-Sodium Silicate Solution	1344-09-8	1-5

**** If the chemical name/CAS # is "proprietary" and/or the weight % is shown as a range, this information had been withheld as a trade secret.**

SECTION 4 - FIRST-AID MEASURES

Description of first aid measures:

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs get medical advice/attention.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician.

Most Important symptoms and effects, both acute and delayed: Causes severe skin burns and eye damage

Indication of any immediate medical attention and special treatment needed: Treat symptomatically

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: Not determined

Special hazards arising from the substance or mixture: Material is corrosive

Flammability classification: Not flammable

Hazardous combustion products: Carbon oxides, other unidentified organic compounds.

Special protective equipment and precautions for firefighters:

Protective equipment for fire-fighters: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Special fire-fighting procedures: Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses. Dike for water control.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

Methods and material for containment and cleaning up: Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply. Ventilate the area. Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material. Do not use combustible absorbents, such as sawdust. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

Special spill response procedures: In case of a transportation accident, contact Chemtrec 1-800-424-9300. If a spill/release in the US in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practice. Use protective equipment recommended in section 8. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling.

Conditions for safe storage: Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep out of reach of children.

Incompatible materials: Acids. Oxidizing agents. Do not mix with other chemicals or cleaners

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:					
	ACGIH TLV		OSHA PEL		
Chemical Name	TWA	STEL	PEL	STEL	Other Exposure Limits

Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m ³		TWA: 2 mg/m ³		IDLH: 10 mg/m ³
Ethyl Alcohol 64-17-5		1000 ppm	1000 ppm		3300 ppm

Exposure controls:

Ventilation and engineering measures: Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

Respiratory protection: If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134). Advice should be sought from respiratory protection specialists.

Skin protection: Wear protective gloves. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. The suitability for a specific workplace should be discussed with the producers of the protective regimes.

Eye face protection: Wear eye/face protection. Wear as appropriate tightly fitting safety goggles; Safety glasses with side-shields.

Other protective equipment: Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

General hygiene considerations: Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Red liquid

Odor: None

Odor threshold: No applicable information available

pH: 12.5 – 13.5

Melting/Freezing point: No applicable information available

Initial boiling point and boiling range: 100°C / 212° F

Flash point: Non to boiling

Flashpoint (Method): No applicable information available

Evaporation rate (BuAe = 1): Similar to water

Flammability (solid, gas): Not flammable

Lower flammable limit (% by vol.): Not Flammable

Upper flammable limit (% by vol.): Not Flammable

Vapor pressure: No applicable information available

Vapor density: No applicable information available

Relative density: 1.07

Solubility in water: Completely soluble

Other solubility(ies): No applicable information available

Partition coefficient: No applicable information available

Auto ignition temperature: No applicable information available

Decomposition temperature: No applicable information available

Viscosity: Similar to water

Volatiles (% by weight): None

Volatile organic Compounds (%VOC's): None

Other physical/chemical comments: No applicable information available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Not normally reactive

Chemical stability: Stable

Possibility of hazardous reactions: No hazardous polymerization

Conditions to avoid: Keep out of reach of children. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.

Incompatible materials: Acids. Oxidizing agents. Do not mix with other chemicals or cleaners

Hazardous decomposition products: None known. Refer to 'Hazardous Combustion Products' in Section 5

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry - inhalation: Avoid breathing vapors or mists

Routes of entry - skin & eye: Avoid contact with skin or eyes. Causes severe skin burns and eye damage

Routes of entry - Ingestion: Do not taste or swallow

Potential Health Effects:

Signs and symptoms of short term (acute) exposure:

Symptoms: Please see section 4 of this SDS sheet for symptoms.

Potential Chronic Health Effects:

Mutagenicity: Not expected to be mutagenic in humans.

Carcinogenicity: Not classifiable as a human carcinogen. Ethanol (64-17-5) has been shown to be carcinogenic (IARC Group 1) in long-term studies only when consumed as an alcoholic beverage.

Reproductive effects: No applicable information available.

Sensitization to material: No applicable information available.

Specific target organ effects: No data available to indicate product or components will have specific target organ effects.

Medical conditions aggravated by overexposure: Preexisting skin or eye disorders.

Toxicological data:

See the following table for individual ingredient acute toxicity data.

Chemical name	LD ₅₀ (Oral, rat)	LD ₅₀ (Dermal. Rabbit)	LC50 (4hr, Inhal., rat)
Tetrapotassium pyrophosphate 7320-34-5		>4640 mg/kg	
Nonoxynol 9016-45-9	1310 mg/kg	2 mL/kg	
Tetrasodium EDTA 64-02-8	10 g/kg		
D-Sodium Silicate Solution 1344-09-8	1153 mg/kg	>4640 mg/kg	
Sodium hydroxide		1350 mg/kg	
Ethyl Alcohol	7060 mg/kg		124.7 mg/L

*All empty cells no applicable information available

Other important toxicological hazards: None reported.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: May be dangerous for the environment. No data is available on the product itself. Should not be released into the environment.

Persistence and degradability: No applicable information available.

Bioaccumulation potential: No applicable information available.

Mobility in soil: No applicable information available.

Other Adverse Environmental effects: No applicable information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for disposal: Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Methods of disposal: Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

RCRA: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste UN defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 - TRANSPORTATION INFORMATION

US 49 CFR/DOT information:

UN No.: Not Regulated

UN Proper Shipping Name: Not Regulated

Transport Hazard Class(es): Not Regulated

Packing Group: Not Regulated

US CERCLA Reportable quantity (RQ):

Chemical Name	RQ
Sodium hydroxide	1000 lb
1310-73-2	

Special precautions for user: Appropriate advice on safety must accompany the package.

Environmental hazards: This material may meet the definition of a marine pollutant

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

TSCA information: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: Not Regulated

US State Right to Know Laws:

California Proposition 65:

Chemical Name	California Proposition 65
Ethyl Alcohol	Carcinogen
64-17-5	Developmental

Other U.S. State "Right to Know" Lists:

Chemical Name	New Jersey	Massachusetts	Pennsylvania
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Sodium hydroxide 1310-73-2 (15-25)	X	X	X
Ethyl Alcohol 64-17-5	X	X	X

International Information:

European EINECs information: Not determined

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

SECTION 16 - OTHER INFORMATION**Legend:**

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
CSA: Canadian Standards Association
DOT: Department of Transportation
ECOTOX: U.S. EPA Ecotoxicology Database
EINECS: European Inventory of Existing Commercial chemical Substances
EPA: Environmental Protection Agency
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IUCLID: International Uniform Chemical Information Database
LC: Lethal Concentration
LD: Lethal Dose
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OECD: Organization for Economic Co operation and Development
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet Material Safety Data Sheet
STEL: Short Term Exposure Limit
TOG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

HMIS Hazard Rating

HEALTH	2	0 – Insignificant
FLAMMABILITY	0	1 – Slight
REACTIVITY	0	2 – Moderate
PERSONAL PROTECTION	X	3 – High
		4 – Extreme

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DISCLAIMER

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of this supplier, it is assumed that users of this material have been fully trained accordingly to the mandatory requirements of GHS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of, or reliance on, any information contained within this form.

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