

PRODUCT

TRASAR® TRAC101

EMERGENCY TELEPHONE NUMBER(S)

(800) 424-9300 (24 Hours) CHEMTREC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:

TRASAR® TRAC101

APPLICATION:

CLOSED LOOP TREATMENT

COMPANY IDENTIFICATION:

Nalco Company 1601 W. Diehl Road Naperville, Illinois 60563-1198

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NFPA 704M/HMIS RATING

HEALTH: 2/2

FLAMMABILITY:

0/0

INSTABILITY:

0/0

OTHER:

0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme * = Chronic Health Hazard

COMPOSITION/INFORMATION ON INGREDIENTS 2.

Our hazard evaluation has identified the following chemical substance(s) as hazardous. Consult Section 15 for the nature of the hazard(s).

Hazardous Substance(s) CAS NO % (w/w) Sodium Nitrite 7632-00-0 10.0 - 30.0 Sodium Molybdate 7631-95-0 1.0 - 5.0Substituted Triazole Proprietary 0.1 - 1.0

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

Contains sodium nitrite. May be harmful or fatal if swallowed. Substances in the product can lead to the formation of methemoglobin. Unborn children are particularly sensitive to methemoglobinemia. Irritating to eyes and skin. Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Use a mild soap if available.

Wear suitable protective clothing, gloves and eye/face protection.

Not flammable or combustible. If product is allowed to dry, the sodium nitrite is an oxidizing agent and can initiate the combustion of other materials. May evolve oxides of carbon (COx) under fire conditions. May evolve oxides of nitrogen (NOx) under fire conditions.

PRIMARY ROUTES OF EXPOSURE:

Eye, Skin



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HUMAN HEALTH HAZARDS - ACUTE:

EYE CONTACT:

Can cause moderate irritation.

SKIN CONTACT:

Can cause moderate irritation.

INGESTION:

Not a likely route of exposure. Ingestion of sodium nitrite can cause methemoglobinemia which can lead to cyanosis and possible death. Large exposures may be fatal. Pregnant women and their fetuses are particularly sensitive to the effects of methemoglobinemia.

INHALATION:

Not a likely route of exposure. Aerosols or product mist may irritate the upper respiratory tract.

AGGRAVATION OF EXISTING CONDITIONS:

Sodium Nitrite. Pregnant women are particularly sensitive to methemoglobinemia.

HUMAN HEALTH HAZARDS - CHRONIC:

Repeated ingestion of small amounts of sodium nitrite causes drops in blood pressure, rapid pulse, headaches and visual disturbances. It may also react with organic amines in the body to form carcinogenic nitrosamines.

4. FIRST AID MEASURES

EYE CONTACT:

Immediately flush eye with water for at least 15 minutes while holding eyelids open. Get medical attention.

SKIN CONTACT:

Immediately flush with plenty of water for at least 15 minutes. Use a mild soap if available. Get medical attention.

INGESTION:

Do not induce vomiting without medical advice. Get immediate medical attention. Urgent hospital treatment is likely to be needed.

INHALATION:

Remove to fresh air, treat symptomatically. If symptoms develop, seek medical advice.

NOTE TO PHYSICIAN:

Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.

5. FIRE FIGHTING MEASURES

FLASH POINT:

Not applicable



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EXTINGUISHING MEDIA:

Not expected to burn. Use extinguishing media appropriate for surrounding fire.

FIRE AND EXPLOSION HAZARD:

Not flammable or combustible. If product is allowed to dry, the sodium nitrite is an oxidizing agent and can initiate the combustion of other materials. May evolve oxides of carbon (COx) under fire conditions. May evolve oxides of nitrogen (NOx) under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING:

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Restrict access to area as appropriate until clean-up operations are complete. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Stop or reduce any leaks if it is safe to do so. Keep people away from and upwind of spill/leak. Ventilate spill area if possible. Ensure clean-up is conducted by trained personnel only. Do not touch spilled material. Have emergency equipment (for fires, spills, leaks, etc.) readily available.

METHODS FOR CLEANING UP:

Do not allow product to evaporate to dryness. SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. LARGE SPILLS: Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Clean contaminated surfaces with water or aqueous cleaning agents. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

ENVIRONMENTAL PRECAUTIONS:

Do not contaminate surface water.

7. HANDLING AND STORAGE

HANDLING:

Do not breathe vapors/gases/dust. Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled.

STORAGE CONDITIONS:

Store in suitable labeled containers. Store the containers tightly closed. Store away from organic chemicals and other oxidizable materials, reducing agents, acids and alkalis.

SUITABLE CONSTRUCTION MATERIAL:

Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS:

Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below.

Substance(s)

Category:

Molybdenum (as Mo), Soluble Compounds as Mo (Respirable fraction.)

Molybdenum (as Mo), Soluble Compounds as Mo

OSHA Z1/PEL

Dynm

mg/m3

Non-Standard

Unit

0.5

ENGINEERING MEASURES:

General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne mist and vapor.

RESPIRATORY PROTECTION:

Where concentrations in air may exceed the limits given in this section or when significant mists, vapors, aerosols, or dusts are generated, an approved air purifying respirator equipped with suitable filter cartridges is recommended. Consult the respirator / cartridge manufacturer data to verify the suitability of specific devices. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

HAND PROTECTION:

When handling this product, the use of chemical gloves is recommended. The choice of work glove depends on work conditions and what chemicals are handled. Please contact the PPE manufacturer for advice on what type of glove material may be suitable. Gloves should be replaced immediately if signs of degradation are observed.

SKIN PROTECTION:

When handling this product, the use of overalls, a chemical resistant apron and rubber boots is recommended. A full slicker suit is recommended if gross exposure is possible.

EYE PROTECTION:

Wear chemical splash goggles.

HYGIENE RECOMMENDATIONS:

Use good work and personal hygiene practices to avoid exposure. Keep an eye wash fountain available. Keep a safety shower available. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. Always wash thoroughly after handling chemicals. When handling this product never eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE

Liquid

APPEARANCE

Clear Light Gold Light yellow



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ODOR

None

SPECIFIC GRAVITY

1.25 - 1.29 @ 60 °F / 15.6 °C

DENSITY

10.42 - 10.76 lb/gal

SOLUBILITY IN WATER

Complete

pH (100 %)

13

Note: These physical properties are typical values for this product and are subject to change.

10. STABILITY AND REACTIVITY

STABILITY:

Stable under normal conditions.

HAZARDOUS POLYMERIZATION:

Hazardous polymerization will not occur.

CONDITIONS TO AVOID:

Extremes of temperature Do not allow product to evaporate to dryness. Dried product residue can act as an oxidizer.

MATERIALS TO AVOID:

Strong acids Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfonic) may generate heat, splattering or boiling and toxic vapors. Contact with reducing agents (e.g. hydrazine, sulfites, sulfide, aluminum or magnesium dust) may generate heat, fires, explosions and toxic vapors. Do not mix with amines. Sodium nitrite can react with certain amines to produce N-nitrosamines, many of which are cancer-causing agents to laboratory animals.

HAZARDOUS DECOMPOSITION PRODUCTS:

Under fire conditions:

Oxides of nitrogen, Oxides of carbon

11. TOXICOLOGICAL INFORMATION

No toxicity studies have been conducted on this product.

ACUTE ORAL TOXICITY:

Species:

Rat

LD50:

85 mg/kg

Test Descriptor:

Hazardous component Sodium Nitrite

SENSITIZATION:

This product is not expected to be a sensitizer.



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CARCINOGENICITY:

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

HUMAN HAZARD CHARACTERIZATION:

Based on our hazard characterization, the potential human hazard is: High

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL EFFECTS:

The following results are for the product.

Acute Fish Results:

Species	Exposure	Test Type	Value	Test Descriptor
Fathead Minnow	96 hrs	LC50	108.2 mg/l	Product
Inland Silverside	96 hrs	LC50	3,048 mg/l	Product

ACUTE INVERTEBRATE RESULTS:

Species	Exposure	Test Type	Value	Test Descriptor	
Ceriodaphnia dubia	48 hrs	LC50	79.1 mg/l	Product	
Mysid Shrimp (Mysidopsis bahia)	96 hrs	LC50	341.9 mg/l	Product	

PERSISTENCY AND DEGRADATION:

Total Organic Carbon (TOC): 29,600 mg/l

Chemical Oxygen Demand (COD): 136,000 mg/l

Biological Oxygen Demand (BOD):

Incubation Period	Value	Test Descriptor
5 d	340 mg/l	Product

The organic portion of this preparation is expected to be readily biodegradable.

MOBILITY:

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	Water	Soil/Sediment
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<5% 30 - 50% 50 - 70%

The portion in water is expected to be soluble or dispersible.

BIOACCUMULATION POTENTIAL

This preparation or material is not expected to bioaccumulate.

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION

Based on our hazard characterization, the potential environmental hazard is: Moderate

If released into the environment, see CERCLA/SUPERFUND in Section 15.

13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Hazardous Waste: D002

Hazardous wastes must be transported by a licensed hazardous waste transporter and disposed of or treated in a properly licensed hazardous waste treatment, storage, disposal or recycling facility. Consult local, state, and federal regulations for specific requirements.

14. TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are as follows.

The presence of an RQ component (Reportable Quantity for U.S. EPA and DOT) in this product causes it to be regulated with an additional description of RQ for road, or as a class 9 for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

LAND TRANSPORT:

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S

Technical Name(s):
UN/ID No:
Sodium Nitrite
UN 2922

Hazard Class - Primary : 8
Hazard Class - Secondary : 6.1
Packing Group : III

Flash Point : Not applicable

Reportable Quantity (per package): 410 lbs

RQ Component: SODIUM NITRITE



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AIR TRANSPORT (ICAO/IATA):

The presence of an RQ component (Reportable Quantity for U.S. EPA and DOT) in this product causes it to be regulated with an additional description of RQ for road, or as a class 9 for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

Proper Shipping Name:

CORROSIVE LIQUID, TOXIC, N.O.S

Technical Name(s):

Sodium Nitrite

UN/ID No:

UN 2922

Hazard Class - Primary : Hazard Class - Secondary : 8 6.1

Packing Group:

Ш

Reportable Quantity (per package):

410 lbs

RQ Component:

SODIUM NITRITE

MARINE TRANSPORT (IMDG/IMO):

Proper Shipping Name:

CORROSIVE LIQUID, TOXIC, N.O.S

Technical Name(s):

Sodium Nitrite

UN/ID No:

UN 2922

Hazard Class - Primary :

8

Hazard Class - Secondary :

6.1

Packing Group:

Ш

15. REGULATORY INFORMATION

This section contains additional information that may have relevance to regulatory compliance. The information in this section is for reference only. It is not exhaustive, and should not be relied upon to take the place of an individualized compliance or hazard assessment. Nalco accepts no liability for the use of this information.

NATIONAL REGULATIONS, USA:

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our hazard evaluation, the following substance(s) in this product is/are hazardous and the reason(s) is/are shown below.

Sodium Nitrite: Target Organ Effect - Kidney, Target Organ Effect - Nervous system, Target Organ Effect - Blood

Sodium Molybdate: Exposure Limit - Compound Class

Substituted Triazole: Corrosive

CERCLA/SUPERFUND, 40 CFR 302:

This product contains the following Reportable Quantity (RQ) Substance. Also listed is the RQ for the product. If a reportable quantity of product is released, it requires notification to the NATIONAL RESPONSE CENTER, WASHINGTON, D.C. (1-800-424-8802).

RQ Substance

Sodium Nitrite

RQ 410 lbs



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SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):

This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 AND 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):

Our hazard evaluation has found this product to be hazardous. The product should be reported under the following indicated EPA hazard categories:

Immediate (Acute) Health Hazard

X

Delayed (Chronic) Health Hazard

Fire Hazard

Sudden Release of Pressure Hazard

Reactive Hazard

Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):

This product contains the following substance(s), (with CAS # and % range) which appear(s) on the List of Toxic Chemicals

Hazardous Substance(s)

CAS NO

% (w/w)

Sodium Nitrite

7632-00-0

10.0 - 30.0

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

NSF NON-FOOD COMPOUNDS REGISTRATION PROGRAM (former USDA List of Proprietary Substances & Non-Food Compounds):

NSF Registration number for this product is: 141328

This product is acceptable for treating boilers, steam lines, and/or cooling systems where neither the treated water nor the steam produced may contact edible products in and around food processing areas, excluding such use in areas where meat and poultry are processed (G10).

This product has been certified as KOSHER/PAREVE for year-round use INCLUDING THE PASSOVER SEASON by the CHICAGO RABBINICAL COUNCIL.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40 CFR 116.4 / formerly Sec. 311:

This product contains the following substances listed in the regulation. Additional components may be unintentionally present at trace levels.

Substance(s)

Citations



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Sodium Nitrite
 Sec. 311

CLEAN AIR ACT, Sec. 112 (Hazardous Air Pollutants, as amended by 40 CFR 63), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances):

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

CALIFORNIA PROPOSITION 65:

Substances listed under California Proposition 65 are not intentionally added or expected to be present in this product.

MICHIGAN CRITICAL MATERIALS:

Substances listed under this regulation are not intentionally added or expected to be present in this product. Listed components may be present at trace levels.

STATE RIGHT TO KNOW LAWS:

The following substances are disclosed for compliance with State Right to Know Laws:

Sodium Nitrite

7632-00-0

INTERNATIONAL CHEMICAL CONTROL LAWS:

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

AUSTRALIA

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

CHINA

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

FUROPE

The substances in this preparation have been reviewed for compliance with the EINECS or ELINCS inventories.

JAPAN

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

KOREA

All substances in this product comply with the Toxic Chemical Control Law (TCCL) and are listed on the Existing Chemicals List (ECL)



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NEW ZEALAND

All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

PHILIPPINES

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

OTHER INFORMATION

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

REFERENCES

Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists, OH., (Ariel Insight™ CD-ROM Version), Ariel Research Corp., Bethesda, MD.

Hazardous Substances Data Bank, National Library of Medicine, Bethesda, Maryland (TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, Geneva: World Health Organization, International Agency for Research on Cancer.

Integrated Risk Information System, U.S. Environmental Protection Agency, Washington, D.C. (TOMES CPS™ CD-ROM Version),
Micromedex, Inc., Englewood, CO.

Annual Report on Carcinogens, National Toxicology Program, U.S. Department of Health and Human Services, Public Health Service.

Title 29 Code of Federal Regulations, Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA), (Ariel Insight™ CD-ROM Version), Ariel Research Corp., Bethesda, MD.

Registry of Toxic Effects of Chemical Substances, National Institute for Occupational Safety and Health, Cincinnati, OH,

(TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

Ariel Insight[™] (An integrated guide to industrial chemicals covered under major regulatory and advisory programs), North American Module, Western European Module, Chemical Inventories Module and the Generics Module (Ariel Insight[™] CD-ROM Version), Ariel Research Corp., Bethesda, MD.



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The Teratogen Information System, University of Washington, Seattle, WA (TOMES CPS™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

Prepared By: Product Safety Department

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