
MATERIAL SAFETY DATA SHEET

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Revised 8/30/04
Replaces (None)
Printed 8/31/04

IWT-4B**MSDS ID: 11602**

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: IWT-4B

Product Descriptor: Radiator Water Treatment

MANUFACTURER: JOHNSON DIVERSEY, INC.

EMERGENCY PHONE NUMBER: (800) 851-7145

3630 E. KEMPER ROAD

CINCINNATI, OH. 45241

II. HAZARDOUS COMPONENTS

Component Name	CAS Number	%	Exposure Limits	Units
SODIUM HYDROXIDE	1310-73-2	1 - 5%	TLV-C 2	MG/M3
SODIUM NITRITE	7632-00-0	5 - 15%	None est.	
SODIUM TETRABORATE	1303-96-4	5 - 15%	TLV 1	MG/M3

III. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

DANGER. CORROSIVE, CAUSES EYE AND SKIN BURNS. HARMFUL OR FATAL IF SWALLOWED. Ingestion may cause gastrointestinal irritation. Ingestion of large amounts may cause poisoning. Symptoms include: methemoglobinemia, cyanosis (blue skin), marked fall in blood pressure, leading to collapse, coma, and possibly death. HARMFUL IF INHALED. May cause respiratory tract irritation. Do not mix with amines: nitrosamines may be formed.

POSSIBLE ROUTES OF ENTRY: Eye contact. Skin contact. Inhalation. Ingestion.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE: EYES: Corrosive. May cause permanent damage including blindness.
SKIN: Corrosive. May cause permanent damage. INGESTION: HARMFUL IF SWALLOWED. May cause corrosive effects to mouth, throat, and stomach. Contains sodium nitrite, which ingested may cause methemoglobinemia, reduced blood pressure, and possibly death due to cardiovascular failure. INHALATION: May cause irritation and corrosive effects to nose, throat and respiratory tract.

CHRONIC: Same as acute effects.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Persons with pre-existing skin disorders may be more susceptible to irritating effects. Individuals with chronic respiratory disorders such as asthma, chronic bronchitis or emphysema, etc., may be more susceptible to irritating effects.

TARGET ORGAN(S) OF CHEMICAL HAZARD(S): Eyes, skin, respiratory tract, and gastrointestinal tract.

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IV. FIRST AID MEASURES

EYES: Immediately flush eyes with running water for at least 15 minutes keeping eyelids open. Get medical attention immediately.

SKIN: Flush immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

INGESTION: Do not induce vomiting. Immediately drink one cupful of water or milk. Never give anything by mouth to an unconscious person. Get medical attention immediately.

INHALATION: If breathing is affected, remove to fresh air. Get medical attention immediately.

V. FIRE FIGHTING MEASURES

FLASH POINT (degrees F): >200 **FLAME EXTENSION:** N/A

FLAMMABLE LIMITS IN AIR BY VOLUME: LEL: N/D UEL: N/D

UNUSUAL FIRE OR EXPLOSIVE HAZARDS: None known.

EXTINGUISHING MEDIA: Water, water spray, CO2, foam or dry powder.

FIRE FIGHTING INSTRUCTIONS: Wear full protective gear and positive pressure breathing apparatus (SCBA) in fire area.

SPECIAL INSTRUCTIONS: Spilled product may cause slippery surface and fall hazard.

VI. ACCIDENTAL RELEASE MEASURES

IF MATERIAL IS RELEASED OR SPILLED:

Contain spill. Wear protective clothing. Soak up or absorb liquid on suitable absorbent material. Collect and place in chemical waste container. Dispose of in accordance with local, State and Federal regulations. Flush spill area with water.

The Reportable Quantity (RQ) of Sodium Nitrite CAS# 7632-00-0 is 86 gallons or 854 Lbs. The Reportable Quantity of Sodium Hydroxide CAS# 1310-73-2 is 860 gallons or 8,547 Lbs.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: Avoid contact with eyes, skin and clothing. Do not taste or swallow. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Remove and wash contaminated clothing and footwear before re-use. Wash thoroughly after handling. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. **FOR COMMERCIAL & INDUSTRIAL USE ONLY.** Keep container tightly closed. Protect from freezing. Store in a dry, cool and well-ventilated area. **KEEP OUT OF REACH OF CHILDREN.**

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: Chemical splash goggles.

PROTECTIVE GLOVES: Chemical resistant gloves. Includes: Neoprene gloves.

RESPIRATORY PROTECTION: If mists/vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over exposure. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI

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VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION (Cont.)

Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

OTHER PROTECTIVE CLOTHING/EQUIPMENT: If major exposure is possible, wear suitable protective clothing and footwear.

ENGINEERING CONTROLS:

VENTILATION: Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.

IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear purple liquid, no odor

BOILING POINT (DEG F): N/D

FREEZING POINT: N/D

SPECIFIC GRAVITY/BULK DENSITY: 1.19

pH: 11.9 - 12.7

pH 1% SOLUTION: 10.7

VOLATILE BY VOLUME: 77

SOLUBILITY IN WATER: Soluble

VAPOR PRESSURE(mmHg): N/D at N/D

VAPOR DENSITY: N/D

X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Product stable.

INCOMPATIBILITY WITH OTHER MATERIALS: Oils and greases; Acids

HAZARDOUS DECOMPOSITION PRODUCTS: oxides of carbon; oxides of nitrogen

HAZARDOUS POLYMERIZATION: None known.

XI. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL TESTING: No data available.

TOXICITY TEST DATA:

No data available.

XII. ECOLOGICAL INFORMATION

ECOTOXICITY TEST DATA:

No data available.

ENVIRONMENTAL FATE: No data available.

XIII. DISPOSAL CONSIDERATIONS

RCRA REGULATED: If pH is greater or equal to 12.5, then the concentrate would be considered D002 - Corrosive if declared hazardous waste.

Discharge diluted product to industrial sewer in accordance with discharge permit or local POTW regulations. Use product in container until empty. Rinse container with water. Recycle or dispose of container according to product labeling or governmental regulations.

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XIV. TRANSPORT INFORMATION

Please refer to the Bill of Lading/receiving documents for up to date shipping information.

XV. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA: All ingredients in this product are on TSCA inventory.

HAPS: None

VOC CONTENT (EPA Method 24A): % VOC: 0 Lb/Gal VOC: 0

CERCLA/EPCRA:

Section 313 Toxic Chemicals:

SODIUM NITRITE, CAS #7632-00-0 AT 11.5%

SARA Section 311/312:

ACUTE: YES CHRONIC: NO FIRE: NO REACTIVITY: NO

SUDDEN RELEASE OF PRESSURE: NO

LISTED CARCINOGEN: None

NTP: No IARC: No OSHA: No

HMIS RATINGS: HEALTH: 3 FIRE: 0 REACTIVITY: 0

PERSONAL PROTECTIVE EQUIPMENT: C

NFPA RATING: HEALTH: 3 FIRE: 0 REACTIVITY: 0 SPECIAL: None

STATE RIGHT-TO-KNOW INFORMATION:

WATER - CAS #7732-18-5

SODIUM HYDROXIDE - CAS #1310-73-2

SODIUM NITRITE - CAS #7632-00-0

SODIUM TETRABORATE CAS #1303-96-4

SODIUM SILICATE -CAS #1344-09-8

CALIFORNIA PROPOSITION 65:

None of the ingredients are on the California proposition 65 list.

XVI. OTHER INFORMATION

Disclaimer: The information contained in this material safety data sheet is based on the knowledge of this specific product and current national legislation. It applies to the product as sold, use dilutions may be less hazardous. It may not be valid for this material if used in combination with any other materials or in a process. It is the user's responsibility to evaluate the handling, and use.