



1610 N 170 E Ave. Tulsa Oklahoma 74116
 Tel: 918-439-4329 Fax: 918-439-4203
 Toll-Free 1-888-834-2001
 www.tomco-harwel.com; www.summitprochem.com

Safety Data Sheet Soke B-4

1. IDENTIFICATION

Synonyms none
 CAS# see Part 3, below
 Material Use enzyme-boosted cleaner

IN AN EMERGENCY CALL: INFOTRAC 1-800-535-5053

2. HAZARD IDENTIFICATION

GHS Class (Category)	skin irritant (2)	eye irritant (2A)	chronic aquatic (3)
Signal Words	WARNING	WARNING	no Signal Word no Pictogram
Hazard Statements	causes skin irritation (H315)	causes serious eye irritation (H319)	harmful to aquatic life with long-lasting effects (H412)



GHS Precautionary Statements for Labeling

P262 Do not get in eyes, on skin or on clothing.
 P264 Wash thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P280 Wear protective gloves and clothing of rubber.
 P273 Avoid release to the environment.

3. COMPOSITION

	CAS NUMBER	%	TLV ppm / mg/m ³	LD ₅₀ (mg/kg) ORAL	LD ₅₀ (mg/kg) SKIN	LC ₅₀ ppm INHALATION
Nonionic Surfactant	on request	10-20%	not listed	>2000	not known	not known
Glycol Ether DPM	34590-94-8	1-5%	100/605 (skin)	5130	>13,000	above 500
d-Limonene	138-86-3	1-5%	not listed	>4400	>5000	not known
Sodium Polyacrylate	9003-04-7	1-5%	not listed	40,000	not toxic	not toxic
2-Propanol	67-63-0	1-5%	200 / 490	>4400	12,900	>5920
Tetrasodium Ethylenediaminetetraacetic Acid	64-02-8	1-5%	not listed	>1780	>5000	not known
Enzyme Mixture	none	0-1%	not listed	not known	not known	not known
Water	7732-18-5	balance	not toxic	90,000	not toxic	not toxic

NOTE: Several other components are either present at 0.1% or less, or are non-toxic and present at 1% or less.

cont'd next page

PLEASE ENSURE THAT THIS SDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.



EMERGENCY INFORMATION: INFOTRAC 1-800-535-5053

4. FIRST AID

SKIN:	Wash with plenty of water. Remove contaminated clothing and do not reuse until laundered. Seek medical help promptly if there is persistent itching or redness in the affected area.
EYES:	Wash eyes with plenty of water, holding eyelids open. Seek medical assistance promptly if irritation is present.
INHALATION:	Remove from contaminated area promptly. CAUTION: Rescuer must not endanger himself! If victim's breathing stops, administer artificial respiration and seek medical aid promptly.
INGESTION:	Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material. Seek medical help promptly.

NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs. The danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity product. The stomach should only be emptied under medical supervision, after the installation of an airway to protect the lungs.

5. FLAMMABILITY & FIRE-FIGHTING

Flash Point	will not flash – <i>solutions of isopropanol below 10% at not flammable</i>
Autoignition Temperature	not known – <i>solutions of isopropanol below 10% at not flammable</i>
Flammable Limits	not known – <i>solutions of isopropanol below 10% at not flammable</i>
Combustion Products	carbon monoxide, nitrogen oxides, smoke, part oxidized hydrocarbon fragments
Firefighting Precautions	as for materials sustaining fire; firefighters must wear SCBA
Static Discharge	cannot accumulate a static charge

6. ACCIDENTAL RELEASE MEASURES

Leak Precaution	dike to control spillage and prevent environmental contamination
Handling Spill	recover free liquid with suitable pumps; absorb residue on an inert sorbent, sweep, shovel & store in closed containers for disposal

7. HANDLING & STORAGE

No special storage requirements. This product contains enzymes to assist in cleaning. These enzymes may cause skin sensitization. Avoid skin contact & wash work clothes frequently. An eye bath should be available near the workplace.

8. EXPOSURE CONTROL & PERSONAL PROTECTION

2-Propanol:

ACGIH TLV	200ppm / 491mg/m ³	ACGIH STEL 400ppm / 983mg/m ³
OSHA PEL	400ppm / 980mg/m ³	OSHA STEL 500ppm / 1225mg/m ³

Dipropylene Glycol Methyl Ether:

ACGIH TLV	100ppm / 606mg/m ³	ACGIH STEL 150ppm / 909mg/m ³
OSHA PEL	100ppm / 600mg/m ³	OSHA STEL 150ppm / 900mg/m ³

Ventilation	2-propanol is only present at below 1%, so no special mechanical ventilation required
Hands	natural rubber gloves – <i>other materials also protect; always confirm suitability with supplier</i>
Eyes	safety glasses with side shields or chemical goggles – <i>always protect eyes!</i>
Clothing	no special protective clothing required

cont'd next page

PLEASE ENSURE THAT THIS SDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.



EMERGENCY INFORMATION: INFOTRAC 1-800-535-5053

9. PHYSICAL AND CHEMICAL PROPERTIES

Odor & Appearance	clear, colorless, liquid with a citrus odor
Odor Threshold	40ppm (<i>Isopropanol</i>), 1000ppm (<i>d-Limonene</i>)
Vapor Pressure	below 33mmHg / 4.4kPa (20°C/ 68°F) – <i>Isopropanol</i>
Evaporation Rate (<i>Butyl Acetate = 1</i>)	not known – <i>as for water</i>
Vapor Density (air = 1)	heavier than air
Boiling Point	100°C / 212°F
Freezing Point	below 0°C / 32°F
Specific Gravity	1.025 (20/20°C)
Water Solubility	complete
Viscosity	not known – <i>mobile liquid</i>
pH	9.8 – <i>moderately alkaline</i>

10. REACTIVITY

Dangerously Reactive With	none known
Also Reactive With	none known
Chemical Stability	stable; will not polymerize
Decomposes in Presence of	not known
Decomposition Products	none apart from Hazardous Combustion Products
Mechanical Impact	not sensitive

11. TOXICITY INFORMATION

i. ACUTE EXPOSURE

Skin Contact	high surfactant concentration may be irritating
Skin Absorption	yes, slowly; toxic effects unlikely by this route
Eye Contact	high surfactant concentration may be severely irritating
Inhalation	mist inhalation may irritate the respiratory system – <i>highly unlikely to occur in normal use</i>
Ingestion	likely to irritate mouth, throat – <i>not a route of industrial exposure & unlikely in normal use</i>

ii. CHRONIC EXPOSURE

General	prolonged or repeated exposure may cause dermatitis <i>through removal of protective skin oils</i>
Sensitizing	not a sensitizer for most people; <i>the enzymes present may be skin sensitizers in certain people</i>
Carcinogen/Tumorigen	not known to be a tumorigen or a carcinogen in humans or animals (<i>please see NOTE, Part 15</i>)
Reproductive Effect	no known effect on humans or animals
Mutagen	not known to be a mutagen or teratogen in humans or animals
Synergistic With	not known
Calculated LD ₅₀ (oral)	7800mg/kg (rat)
Calculated LD ₅₀ (skin)	81,860mg/kg (rabbit)
LC ₅₀ (inhalation)	not known – <i>insufficient data to calculate</i>

12. ECOLOGICAL INFORMATION

Nonionic Surfactant:

Bioaccumulation	the surfactant does not bioaccumulate; <i>however, breakdown product, unethoxylated nonylphenol, is poorly water soluble & may accumulate</i>
Biodegradation	34% in 20 days to di- & mono-ethoxylate; <i>these latter compounds resist further biodegradation (below)</i>
Abiotic Degradation	may react with atmospheric hydroxyl (OH) radicals; low volatility – a minor degradation route
Mobility in soil, water	sufficiently water soluble to move readily through soil and the water column
Aquatic Toxicity	
LC ₅₀ (Fish, 96 hr)	2.1-2.6mg/liter (<i>Pimephelas promelas</i>), 13.9-19.5mg/liter (<i>Poecilia reticulata</i> – 48hr)
LC ₅₀ (Crustacea, 48hr)	3.8-6.2 & 18.2mg/liter (<i>Daphnia magna</i>), 20.9mg/liter (<i>Gammarus pulex</i>)
EC ₅₀ (Algae, 96hr)	15mg/liter (<i>Lemna minor</i>), 7mg/liter (<i>Scenedesmus quadricauda</i>)

NOTE: The Nonylphenol Ethoxylate class of compounds biodegrade to estrogenic hormone mimics in the environment & may lead to instances of reproductive failure in shore birds, amphibia & fish. (For further information, see Notes in Part XV, Regulations)

cont'd next page

PLEASE ENSURE THAT THIS SDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.



EMERGENCY INFORMATION: INFOTRAC 1-800-535-5053

12. ECOLOGICAL INFORMATION, cont'd

d-Limonene:

Bioaccumulation	probably not a bioaccumulator because it is metabolized by animal tissue
Biodegradation	biodegrades in the presence of oxygen; 48-100% in 2-3 weeks (various studies)
Abiotic Degradation	reacts with atmospheric hydroxyl radicals; estimated ½-life in air is 40 minutes
Mobility in soil, water	water insoluble; moves slowly in soil and water
Aquatic Toxicity	<i>d-Limonene is classified as a Marine Pollutant</i>
LC ₅₀ (Fish, 96hr)	34mg/liter (Leuciscus idus), 80mg/liter (Oncorhynchus mykiss), 0.7mg/liter (Pimephales promelas)
EC ₅₀ (Crustacea, 48hr)	0.031 & 0.75mg/liter (Daphnia magna)
NOEC – 96hr (Algæ)	4.1mg/liter (“green algæ”) – <i>the algæ are not specifically identified</i>

Sodium Polyacrylate:

Bioaccumulation	poorly absorbed and water soluble; will not bioaccumulate
Biodegradation	biodegrades slowly & incompletely; rate not known
Abiotic Degradation	not known
Mobility in soil, water	water soluble but, readily precipitated on contact with magnesium or calcium ions in soil or water
Aquatic Toxicity	
LC ₅₀ (Fish 96 hr)	56,000mg/liter (<i>species of fish not given</i>)
LC ₅₀ (Crustacea, 48hr)	6000mg/liter (Daphnia magna)
EC ₅₀ (Algae, 96hr)	not known
LC ₅₀ (Microorganisms)	not known

Tetrasodium Ethylenediaminetetraacetic Acid:

Bioaccumulation	not a bioaccumulator
Biodegradation	various values reported from 1% in 72dy to 63% in 5dy (<i>major component CAS# 64-02-8, only</i>)
Abiotic Degradation	not known
Mobility in soil, water	highly water soluble; expected to bind to soil particles; may move slowly or not at all in soil & water
Aquatic Toxicity	<i>(for major component, CAS# 64-02-8, only)</i>
LC ₅₀ (Fish, 96hr)	41, 159, 486, 532, 1030 & 2070mg/liter (Lepomis macrochirus), 60mg/liter (Pimephelas promelas) & others tested at 24 and 48 hours
EC ₅₀ (Crustacea, 24hr)	610, 625 & 1030mg/liter (Daphnia magna), 4834mg/liter (Crangon crangon, 96hr) & others
EC ₅₀ (Algae)	>100mg/liter (Scenedesmus subspicatus)
EC ₁₀ (Bacteria)	55mg/liter (Pseudomonas putida), >1000mg/liter (<i>other bacteria</i>)
EC ₅ (Microbes)	663mg/liter (Chilomonas paramecium)

Enzyme Mix:

no ecological data available – expected to be readily biodegradable & non-toxic to aquatic life

13. DISPOSAL CONSIDERATIONS

Waste Disposal	do not flush to sewer; due to the presence of nonylphenol ethoxylate, waste material should be handled by a hazardous waste specialist
Containers	Drums should be reused. Recondition and pressure test by a licensed reconditioner prior to re-use. Pails must be vented and thoroughly dried prior to crushing and recycling. IBCs (intermediate bulk containers): polyethylene bottle must be pressure tested & recertified at 30 months. Replace at 60 months (5 years). Steel containers must be inspected, pressure tested & recertified every 5 years. Warning: never cut, drill, weld or grind on or near this container, even if empty.

14. TRANSPORT INFORMATION

USA 49 CFR & Canada/International TDG

Product Identification Number	UN – not regulated for transport
Shipping Name	not regulated for transport
Classification	not regulated for transport
Marine Pollution	not a marine pollutant
ERAP Required	No

PLEASE ENSURE THAT THIS SDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.



EMERGENCY INFORMATION: INFOTRAC 1-800-535-5053

15. REGULATIONS

Canada DSL on inventory
U.S.A. TSCA on inventory

U.S.A. Regulations:

In the USA, the EPA mounted (August 18, 2010) an "action plan" for nonylphenol ethoxylates: See the *Nonylphenol & Nonylphenol Ethoxylates Action Plan Summary*, <http://www.epa.gov/oppt/existingchemicals/pubs/actionplans/np-npe.html> AND http://www.epa.gov/oppt/existingchemicals/pubs/actionplans/RIN2070-ZA09_NP-NPEs%20Action%20Plan_Final_2010-08-09.pdf

15. REGULATIONS, cont'd

Europe EINECS all components on inventory – but see notes, below:

It is prohibited to place on the market or use plant protection products containing nonylphenol ethoxylates (C₂H₄O)_nC₁₅H₂₄O compounds because these active substances have not been included in Annex I to Council Directive 91/414/EEC of 15 July 1991 concerning the placing of plant protection products on the market (OJ L 230, 19.8.1991, p 1-32) pursuant to Commission Regulation (EC) No 2076/2002 of 20 November 2002 extending the time period referenced in Article 8(2) of Council Directive 91/414/EEC concerning the non-inclusion of certain active substances in Annex I to that Directive and the withdrawal of authorisations for plant protection products containing these substances (OJ L 319, 23.11.2002, p. 3-11).

Furthermore, in accordance with point 46 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, it is prohibited to place on the market or use nonylphenol ethoxylates (C₂H₄O)_nC₁₅H₂₄O compounds, as substances or in mixtures in concentrations equal to or greater than 0,1 % by weight for several purposes (OJ L 396, 30.12.2006, p. 1-849) pursuant to Commission Regulation (EC) No 552/2009 of 22 June 2009 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards Annex XVII (OJ L 164, 26.6.2009, p. 7-31).

Nonylphenol ethoxylates (C₂H₄O)_nC₁₅H₂₄O compounds have therefore been added to Annex I to Regulation (EC) No 689/2008 of the European Parliament and of the Council concerning the export and import of dangerous chemicals (OJ L 204, 31.7.2008, p. 1-35).

European Regulations forbid the use of Nonylphenol Ethoxylates for dispersive uses, but allow their use in applications where there is little or no release to the environment. Read this brief summary from July 1997 (when Europe began to reduce nonylphenol ethoxylate use):

<http://md1.csa.com/partners/viewrecord.php?requester=gs&collection=ENV&recid=4243335&q=http%3A%2F%2Fwww.csa.com%2Fpartners%2Fviewrecord.php%3Frequester%3Dgs%26collection%3DENV%26recid%3D4243335&uid=791557892&setcookie=yes>

NOTE: EDTA (Tetrasodium Ethylenediaminetetraacetic Acid) is an animal carcinogen, but only on prolonged ingestion. Since ingestion is not a route of industrial exposure, this product cannot be classified as a carcinogen.

16. OTHER INFORMATION

Date of Preparation September 2014

Date of Revision -

Prepared for Tomco-Harwel, by Peter Bursztyn

With data from the Registry of Toxic Effects of Chemical Substances (RTECS), Hazardous Substance Data Base (HSDB), Cheminfo (CCOHS), OSHA, IUCLID Datasheets (European Chemical Substance Information System - ESIS), & others sources (below if used), as required/available

last page of SDS

PLEASE ENSURE THAT THIS SDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.



EMERGENCY INFORMATION: INFOTRAC 1-800-535-5053