Tap Water Conditioner

Mars (Mars Fishcare)

Chemwatch: 4658-49

Version No: 4.1.1. Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Tap Water Conditioner
Chemical Name	Not Applicable
Synonyms	Solution ID# 3350
Proper shipping name	Not Applicable
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

Relevant identified uses of the substance or mixture and uses advised against

	Relevant identified uses	Use according to manufacturer's directions. , For product 52.
--	--------------------------	--

Details of the supplier of the safety data sheet

Registered company name	Mars (Mars Fishcare)		1
Address	50 East Hamilton Street Chalfont 18914 PA United States		
Telephone	+1 215 822 8181		
Fax	+1 215 822 1906	1	1
Website	Not Available		
Email	Not Available		1

Emergency telephone number

Association / Organisation	Not Available	1	
Emergency telephone numbers	Not Available		
Other emergency telephone numbers	Not Available		

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

CHEMWATCH HAZARD RATINGS

	Min Max		
Flammability	0		
Toxicity	2		
Body Contact	2	0 = Minimum	
Reactivity	1	2 = Moderate	
Chronic	2	3 = High 4 = Extreme	

GHS Classification ^[1]	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Skin Sensitizer Category 1, STOT - SE (Resp. Irr.) Category 3, Acute Aquatic Hazard Category 1
Legend:	1. Classified by Chemwatch; 2. Classification drawn from EC Directive 67/548/EEC - Annex I ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

GHS label elements	
SIGNAL WORD	WARNING
Hazard statement(s)	
H315	Causes skin irritation

Chemwatch Hazard Alert Code: 2

Issue Date: 01/01/2013 Print Date: 10/01/2014 L.GHS.USA.EN

Tap Water Conditioner

H319	Causes serious eye irritation
H317	May cause an allergic skin reaction
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

Precautionary statement(s) Prevention

P271	Use only outdoors or in a well-ventilated area.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.	
P273	Avoid release to the environment.	
P272	Contaminated work clothing should not be allowed out of the workplace.	

Precautionary statement(s) Response

P321	Specific treatment (see advice on this label).
P302+P352	IF ON SKIN: Wash with plenty of water and soap
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary statement(s) Storage

P405	P405 Store locked up.	
P403+P233 Store in a well-ventilated place. Keep container tightly closed.		

Precautionary statement(s) Disposal

Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

P501

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
7772-98-7	30.2	sodium thiosulfate
64-02-8	9.8	EDTA tetrasodium salt

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

- For exposures involving sulfides and hydrogen sulfide (including gastric acid decomposition products of alkaline sulfides):
 - ▶ Hydrogen sulfide anion produces its major toxic effect through inhibition of cytochrome oxidases.
 - Symptoms include profuse salivation, nausea, vomiting and diarrhea. Central nervous effects may include giddiness, headache, vertigo,

 amnesia, confusion and unconsciousness. Tachypnoea, palpitations, tachycardia, arrhythmia, sweating, weakness and muscle cramps may also indicate overexposure. Treatment involves: If respirations are depressed, application of artificial respiration, administration of oxygen (continue after spontaneous breathing is established). For severe poisonings administer amyl nitrite and sodium nitrite (as for cyanide poisoning) but omit sodium thiosulfate injection. Atropine sulfate (0.6 mg intramuscularly) may contribute symptomatic relief. Conjunctivitis may be relieved by installation of 1 drop of olive-oil in each eye and sometimes by 3 drops of epinephrine solution (1:1000) at frequent intervals. Occasionally local anesthetics and hot and cold compresses are necessary to control pain. Antibiotics at first hint of pulmonary infection.
[Gosselin etal, Clinical Toxicology of Commercial Products]
 Hydrogen sulfide is metabolised by oxidation to sulfate, methylation and reaction with metallic ion- or disulfide containing proteins (principally cytochrome c oxidase). This latter reaction is associated with aerobic, cellular respiration and is largely responsible for the toxic effects

SECTION 5 FIREFIGHTING MEASURES

xtinguishing media	 There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area. 			
pecial hazards arising from the sul	bstrate or mixture			
Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result			
Advice for firefighters				
	Alert Fire Bringde and tell them location and nature of bazard			

Fire Fighti	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. 	
Fire/Explosion Haza	 Non combustible. Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of: 	

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	 Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite.
Major Spills	Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.
	Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers.

Conditions for safe storage, including any incompatibilities

Suitable container	 Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. 	
Storage incompatibility	 Contact with acids produces toxic fumes Avoid reaction with oxidising agents 	

PACKAGE MATERIAL INCOMPATIBILITIES

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

)			
lot Available				
EMERGENCY LIMITS				
Ingredient	TEEL-0 TEEL-1 TEEL-2 TEEL-3			
sodium thiosulfate	10(ppm)	30(ppm)	50(ppm)	500(ppm)
EDTA tetrasodium salt	40 / 7.5(ppm)	125 / 25(ppm)	500 / 150(ppm)	500(ppm)
Ingredient	Original IDLH Revised IDLH			
Tap Water Conditioner	Not Available		Not Available	
Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.			
Exposure controls Engineering controls are used to remove a bazard or place a barrier between the worker and the bazard. Well-designed engineering controls				
Appropriate engineering controls	can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk.			
Personal protection				
Eye and face protection			osorb and concentrate irritants. A written po workplace or task.	blicy document, describing
Eye and face protection Skin protection	 Chemical goggles. Contact lenses may pose a special 	ecial hazard; soft contact lenses may a		blicy document, describing
	 Chemical goggles. Contact lenses may pose a spe the wearing of lens or restriction 	ecial hazard; soft contact lenses may a ns on use, should be created for each es, e.g. PVC.		blicy document, describing
Skin protection	 Chemical goggles. Contact lenses may pose a spetthe wearing of lens or restriction See Hand protection below Wear chemical protective glove 	ecial hazard; soft contact lenses may a ns on use, should be created for each es, e.g. PVC.		blicy document, describing

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the Tap Water Conditioner

Thermal hazards

Material	CPI
NATURAL RUBBER	A
NEOPRENE	A
NITRILE	A
NITRILE+PVC	А
PVC	A

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear odourless liquid; mixes with water.			
Physical state	Liquid	Relative density (Water = 1)	1.223	
Odour	Not Available	Partition coefficient n-octanol / water	Not Available	
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable	
pH (as supplied)	10-12	Decomposition temperature	Not Available	
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available	

Respiratory protection

Not Applicable

Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution(1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).
Chronic	Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. Chronic low level exposures to hydrogen sulfide may produce headache, fatigue, dizziness, irritability and loss of libido. These symptoms may also result from damage produced by isolated or repeated unmeasured peak high level exposures in healthy persons or those suffering from pre-existing neurological diseases. A study on long term effects showed that H2S apparently can cause continuing, sometimes unrecognised olfactory deficits.

Tap Water Conditioner	ΤΟΧΙϹΙΤΥ	IRRITATION
	Not Available	Not Available
	TOXICITY	IRRITATION
sodium thiosulfate	Oral (human) TDLo: 300 mg/kg/7d	[Hach]
	Not Available	Not Available
	ΤΟΧΙΟΙΤΥ	IRRITATION
	Oral (Rat) LD50: 1260 mg/kg *	*[BASF]
EDTA tetrasodium salt	Oral (Rat) LD50: 630 mg/kg *	Eyes (rabbit): 1.9 mg
		Eyes (rabbit):100 mg/24h-moderate
		Skin (rabbit):500 mg/24h-moderate
	Not Available	Not Available

Not available. Refer to individual constituents.

SODIUM THIOSULFATE

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with

Тар	Water	Conditioner
-----	-------	-------------

	abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS.		
EDTA TETRASODIUM SALT	* Sigma Aldrich - for the dihydrate		
Acute Toxicity	Not Applicable	Carcinogenicity	Not Applicable
Skin Irritation/Corrosion	Skin Corrosion/Irritation Category 2	Reproductivity	Not Applicable
Serious Eye Damage/Irritation	Eye Irritation Category 2A	STOT - Single Exposure	STOT - SE (Resp. Irr.) Category 3
Respiratory or Skin sensitisation	Skin Sensitizer Category 1	STOT - Repeated Exposure	Not Applicable
Mutagenicity	Not Applicable	Aspiration Hazard	Not Applicable

CMR STATUS

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

NOT AVAILABLE

Ingredient	Endpoint	Test Duration	Effect	Value	Species	BCF
Tap Water Conditioner	Not Available					

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Not Available	Not Available	Not Available

Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available
Mobility in soil	
Ingredient	Mobility
Not Available	Not Available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	 Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after admixture with suitable combustible material). Decontaminate empty containers.
------------------------------	---

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant



Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

 sodium thiosulfate(7772-98-7) is found on the following regulatory lists
 "US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory","OECD List of High Production Volume (HPV)

 Chemicals", "International Numbering System for Food Additives", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "US FDA CFSAN Food Additives Status

Tap Water Conditioner

	List", "FisherTransport Information", "Sigma-AldrichTransport Information", "US DOE Temporary Emergency Exposure Limits (TEELs)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Maritime Dangerous Goods Requirements (IMDG Code)", "Belgium Federal Public Service Mobility and Transport, Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (Dutch)", "US Department of Transportation (DOT), Hazardous Material Table", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "US Postal Service (USPS) Numerical Listing of Proper Shipping Names by Identification (ID) Number", "US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide", "US FDA CFSAN GRAS Substances evaluated by the Select Committee on GRAS Substances (SCOGS)", "US FDA Everything Added to Food in the United States (EAFUS)"
EDTA tetrasodium salt(64-02-8) is found on the following regulatory lists	"US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory","IMO IBC Code Chapter 17: Summary of minimum requirements","US American Cleaning Institute Cleaning Product Ingredient Inventory","OECD List of High Production Volume (HPV) Chemicals", "US EPA High Production Volume Program Chemical List", "International Fragrance Association (IFRA) Survey: Transparency List", "US FDA Indirect Food Additives - Substances for use as Components of Coatings - Resinous and polymeric coatings 21CFR 175-300", "US FDA Indirect Food Additives: Adhesives and Components of Coatings - Substances for Use Only as Components of Adhesives - Pressure-sensitive adhesives", "US Cosmetic Ingredient Review (CIR) Cosmetic ingredients found safe as used", "US FDA Everything Added to Food in the United States (EAFUS)", "US FDA Cumulative Estimated Daily Intakes (CEDIs) and Acceptable Daily Intakes (ADIs)", "US FDA CFSAN Food Additives Status List", "FisherTransport Information", "US EPA Master Testing List - Index I Chemicals Listed", "US DOE Temporary Emergency Exposure Limits (TEELs)", "FisherTransport Information", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "Acros Transport Information", "OSPAR National List of Candidates for Substitution – United Kingdom", "US Harmonized Tariff Schedule - Pharmaceutical Appendix"

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.