

SAFETY DATA SHEET

1. Identification

Product identifier	TOXIMUL 3474F		
Other means of identification			
Product code	1513		
Recommended use	Surfactant		
Recommended restrictions	For industrial use only.		
Manufacturer/Importer/Supplier/I	Distributor information		
Manufacturer			
Company name	Stepan Company		
Address	22 West Frontage Road		
	Northfield, IL 60093 USA		
Telephone	General	1-847-446-7500	
E-mail	Not available.		
Emergency phone number	Medical	1-800-228-5635	
	Chemtrec	1-800-424-9300	
	Chemtrec Int'l	+1 703-527-388	7
2. Hazard(s) identification			
Physical hazards	Flammable liquids		Category 4
Health hazards	Acute toxicity, oral		Category 4
	Skin corrosion/irritation		Category 2
	Serious eye damage/eye irrit	tation	Category 2A
	Carcinogenicity		Category 2
Environmental hazards	Hazardous to the aquatic entransity hazard	vironment, acute	Category 2
	Hazardous to the aquatic en long-term hazard	vironment,	Category 3
OSHA defined hazards	Not classified.		
Label elements			

Signal word Warning Combustible liquid. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. **Hazard statement** Suspected of causing cancer. Toxic to aquatic life. Harmful to aquatic life with long lasting effects. **Precautionary statement** Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin: Wash with Response plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Specific treatment (see this label). If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish. Store in a well-ventilated place. Keep cool. Store locked up. Storage Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Anionic/nonionic detergent blend*		Proprietary*	60 - 80
_Solvent naphtha, petroleum, heavy arom.		64742-94-5	10 - < 20
1-hexanol		111-27-3	5 - < 10
Naphthalene		91-20-3	1 - < 3
Other components below reportable le	avels		3 - < 5

Other components below reportable levels

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from	The product is combustible, and heating may generate vapors which may form explosive vapor/air

mixtures. During fire, gases hazardous to health may be formed. Special protective equipment

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials. Combustible liquid.

6. Accidental release measures

and precautions for firefighters

Personal precautions, protective equipment and emergency procedures

equipment/instructions

Specific methods

General fire hazards

the chemical

Fire fighting

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use.
Environmental precautions	Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from open flames, hot surfaces and sources of ignition. Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep in an area equipped with sprinklers.
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8. Exposure controls/personal protection

Components	Туре	Value	
Naphthalene (CAS 91-20-3)	PEL	50 mg/m3	
		10 ppm	
US. ACGIH Threshold Limit			
Components	Туре	Value	
Naphthalene (CAS 91-20-3)	TWA	10 ppm	
US. NIOSH: Pocket Guide to	o Chemical Hazards		
Components	Туре	Value	
Naphthalene (CAS 91-20-3)	STEL	75 mg/m3	
		15 ppm	
	TWA	50 mg/m3	
		10 ppm	
US. Workplace Environmen	tal Exposure Level (WEEL) Guides		
Components	Туре	Value	Form
1-hexanol (CAS 111-27-3)	TWA	40 ppm	
Anionic/nonionic detergent blend	TWA	10 mg/m3	Aerosol.
logical limit values	No biological exposure limits noted for	the ingredient(s).	
osure guidelines			
US - California OELs: Skin	designation		
Naphthalene (CAS 91-20	0-3) Can be	absorbed through the skin.	
US ACGIH Threshold Limit	Values: Skin designation		
Naphthalene (CAS 91-20	0-3) Can be	e absorbed through the skin.	
propriate engineering trols	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits. exposure limits have not been established, maintain airborne levels to an acceptable level. Eye		

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Amber.
Odor	Not available.
Odor threshold	Not available.
рН	5.9 (5% 50/50 IPA/H2O)
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 201 °F (> 93.89 °C)
Flash point	147.0 °F (63.9 °C) Setaflash
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Dispersible
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	2050 cP @ 104F
Other information	
Density	8.82 lb/in3 @ 25C
Pour point	30 °F (-1.11 °C)
10. Stability and reactivity	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Upon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

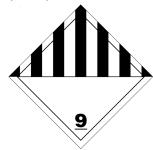
Information on toxicological effects

Acute toxicity	Harmful if swallowed. Expected to be a low hazard for usual industrial or commercial handling by
	trained personnel.

Product	Species	Test Results	
TOXIMUL 3474F			
<u>Acute</u>			
Dermal			
LD50	Rabbit	> 2000 mg/kg ATEmix	
Oral			
LD50	Rat	1600 mg/kg ATEmix	
Components	Species	Test Results	
Naphthalene (CAS 91-20-3)			
<u>Acute</u>			
Dermal	District		
LD50	Rabbit	> 2 g/kg	
Oral			
LD50	Rat	490 mg/kg	
Skin corrosion/irritation	Causes skin irritation.		
Serious eye damage/eye irritation	Causes serious eye irritation.		
Respiratory or skin sensitization			
Respiratory sensitization	Not available.		
Skin sensitization	This product is not expected to cause skin ser	sitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.		
Carcinogenicity	Suspected of causing cancer.		
IARC Monographs. Overall B	valuation of Carcinogenicity		
Naphthalene (CAS 91-20 OSHA Specifically Regulate	3) 2B Possibly ca d Substances (29 CFR 1910.1001-1052)	arcinogenic to humans.	
Not regulated.			
	gram (NTP) Report on Carcinogens		
Naphthalene (CAS 91-20	· · ·	nticipated to be a Human Carcinogen.	
Reproductive toxicity Specific target organ toxicity -	This product is not expected to cause reprodu Not applicable.	cive of developmental enects.	
single exposure			
Specific target organ toxicity - repeated exposure	Not applicable.		
Aspiration hazard	Not likely, due to the form of the product.		
12. Ecological information			
Ecotoxicity	Toxic to aquatic life. Harmful to aquatic life wit		
Persistence and degradability	No data is available on the degradability of this	s product.	
Bioaccumulative potential	No data available.		

Partition coefficient n-octance Anionic/nonionic detergent bler			
Mobility in soil	No data available.		
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		
13. Disposal consideration	S		
Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.		
Local disposal regulations	Dispose in accordance with all applicable regulations.		
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.		
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).		
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.		
14. Transport information			
General	The provided transportation classifications are for bulk shipments only and may not be representative of all package/shipment sizes.		
DOT			
UN number	NA1993		
UN proper shipping name Transport hazard class(es)	Combustible Liquid, N.O.S. (Aromatic Naphtha, Hexanol; Naphthalene RQ = 5882 LBS)		
Class	9		
Subsidiary risk	-		
Packing group	 Natawallahia		
Special precautions for user IATA	Not available.		
UN number	UN3082		
UN proper shipping name Transport hazard class(es)	RQ, Environmentally hazardous substance, liquid, N.O.S. (Naphthalene)		
Class	9		
Subsidiary risk	-		
Packing group Environmental hazards	III No.		
Special precautions for user			
IMDG			
UN number	UN3082		
UN proper shipping name Transport hazard class(es)	RQ, Environmentally hazardous substance, liquid, N.O.S. (Naphthalene)		
Class	9		
Subsidiary risk	-		
Packing group Environmental hazards			
Marine pollutant	No.		
EmS	Not available.		
Special precautions for user Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not available. Not available.		

DOT; IATA; IMDG



15. Regulatory information

US federal regulations	This product is a "H Standard, 29 CFR		ined by the OSHA Hazard Communication
TSCA Section 12(b) Export	Notification (40 CFF	R 707, Subpt. D)	
Not regulated.			
CERCLA Hazardous Substa	nce List (40 CFR 30	2.4)	
Naphthalene (CAS 91-20	-3)	Listed.	
SARA 304 Emergency relea	se notification		
Not regulated.			
OSHA Specifically Regulate	d Substances (29 C	FR 1910.1001-1052)	
Not regulated.			
Superfund Amendments and Re		f 1986 (SARA)	
SARA 302 Extremely hazard	dous substance		
Not listed.			
SARA 311/312 Hazardous chemical	Yes		
Classified hazard		, aerosols, liquids, or solids)	
categories	Acute toxicity (any Skin corrosion or ir		
	Serious eye damag		
	Carcinogenicity	, ,	
SARA 313 (TRI reporting)			
Chemical name		CAS number	% by wt.
Naphthalene		91-20-3	1 - < 3
Other federal regulations			
Clean Air Act (CAA) Sectior	n 112 Hazardous Air	Pollutants (HAPs) List	
Naphthalene (CAS 91-20 Clean Air Act (CAA) Sectior		Release Prevention (40 CFI	R 68.130)
Not regulated.			
Clean Water Act (CWA)			
	Hazardous substar	nce	
Section 112(r) (40 CFR	Hazardous substar	nce	
Section 112(r) (40 CFR 68.130)		nce	
	Hazardous substar	nce	
68.130) Safe Drinking Water Act		ice	
68.130) Safe Drinking Water Act (SDWA)	Not regulated.	ice	
68.130) Safe Drinking Water Act (SDWA) US state regulations California Proposition 6	Not regulated. 55 This product can e	xpose you to chemicals inclu	uding acetaldehyde, which are known to the State of
68.130) Safe Drinking Water Act (SDWA) US state regulations California Proposition 6	Not regulated. 55 This product can e California to cause	xpose you to chemicals inclu cancer, and ethylene glycol	, which are known to the State of California to
68.130) Safe Drinking Water Act (SDWA) US state regulations California Proposition 6	Not regulated. 55 This product can e California to cause cause birth defects	xpose you to chemicals inclu cancer, and ethylene glycol or other reproductive harm.	, which are known to the State of California to
68.130) Safe Drinking Water Act (SDWA) US state regulations California Proposition 6 WARNING:	Not regulated. 55 This product can e California to cause cause birth defects to www.P65Warnir	xpose you to chemicals inclu cancer, and ethylene glycol or other reproductive harm. igs.ca.gov.	, which are known to the State of California to
68.130) Safe Drinking Water Act (SDWA) US state regulations California Proposition 6 WARNING California Proposition 6	Not regulated. 55 This product can e California to cause cause birth defects to www.P65Warnir 55 - CRT: Listed date	xpose you to chemicals inclu cancer, and ethylene glycol or other reproductive harm. igs.ca.gov. e/Carcinogenic substance	, which are known to the State of California to For more information go
68.130) Safe Drinking Water Act (SDWA) US state regulations California Proposition 6 WARNING: California Proposition 6 1,4-dioxane (CAS 12	Not regulated. 55 This product can e California to cause cause birth defects to www.P65Warnir 55 - CRT: Listed date 23-91-1)	xpose you to chemicals inclu cancer, and ethylene glycol or other reproductive harm. igs.ca.gov. e/Carcinogenic substance Listed: January	, which are known to the State of California to For more information go 1, 1988
68.130) Safe Drinking Water Act (SDWA) US state regulations California Proposition 6 WARNING California Proposition 6	Not regulated. 55 This product can e. California to cause cause birth defects to www.P65Warnir 55 - CRT: Listed date 23-91-1) 75-07-0)	xpose you to chemicals inclu cancer, and ethylene glycol or other reproductive harm. igs.ca.gov. e/Carcinogenic substance	, which are known to the State of California to For more information go 1, 1988 1988
68.130) Safe Drinking Water Act (SDWA) US state regulations California Proposition (WARNING: California Proposition (1,4-dioxane (CAS 12 Acetaldehyde (CAS Ethylene oxide (CAS Naphthalene (CAS 9	Not regulated. 55 This product can e. California to cause cause birth defects to www.P65Warnir 55 - CRT: Listed date 23-91-1) 75-07-0) 5 75-21-8) 11-20-3)	xpose you to chemicals inclu cancer, and ethylene glycol or other reproductive harm. Igs.ca.gov. e/Carcinogenic substance Listed: January Listed: April 1, Listed: July 1, 7	, which are known to the State of California to For more information go 71, 1988 1988 1987
68.130) Safe Drinking Water Act (SDWA) US state regulations California Proposition (WARNING: California Proposition (1,4-dioxane (CAS 12 Acetaldehyde (CAS Ethylene oxide (CAS)	Not regulated. 55 This product can e. California to cause cause birth defects to www.P65Warnir 55 - CRT: Listed date 23-91-1) 75-07-0) 5 75-21-8) 11-20-3) 55 - CRT: Listed date	xpose you to chemicals inclu cancer, and ethylene glycol or other reproductive harm. Igs.ca.gov. e/Carcinogenic substance Listed: January Listed: April 1, Listed: July 1, 7	, which are known to the State of California to For more information go 71, 1988 1988 1987

 Ethylene oxide (CAS 75-21-8)
 Listed: August 7, 2009

 California Proposition 65 - CRT: Listed date/Female reproductive toxin
 Ethylene oxide (CAS 75-21-8)

 Listed: February 27, 1987

 California Proposition 65 - CRT: Listed date/Male reproductive toxin

 Ethylene oxide (CAS 75-21-8)

 Listed: August 7, 2009

 US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Naphthalene (CAS 91-20-3)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory (NZIoC)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date Revision date Version #	05-22-2015 08-22-2018 02
Disclaimer	Terms and Conditions. This SDS is designed only as guidance for the products to which it applies. To the greatest extent permitted by applicable law, nothing contained herein creates any legal obligation including contractual obligations, expressed or implied warranties, including any warranties of merchantibility or fitness for particular purpose; or confers any intellectual property rights, including rights to use trademarks or a license to use patents, issued or pending. The information contained herein is based on the manufacturer's own study and the work of others, and is subject to change at any time without further notice. There is no warranty, expressed or implied, as to the accuracy, completeness or adequacy of the information contained herein, and neither the provider nor the manufacturer (nor the agents, directors, officers, contractors or employees of either) are liable to any party for any damages of any nature, including direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of any information in this SDS, or in any other way related (directly or indirectly) to this SDS. The receipt and use of this information constitutes consent to these terms and conditions.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.