SAFETY DATA SHEET

Revision Date 24-Aug-2016
Version 1.01

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name TLC Formula 321
Product code W.20437 REV_B

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

Recommended Use Professional Cleaning Agent
Restrictions on use Professional Use Only

1.3 Details of the supplier of the safety data sheet

Supplier
Legend Brands
Chemspec
15180 Josh Wilson Road
Burlington, WA 98233
800-932-3030

E-mail Address msds@chemspecworld.com

1.4 Emergency telephone number

Emergency telephone number
INFOTRAC 1-800-535-5053 (North America)
1-352-323-3500 (International)

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 2
Flammable liquids	Category 4

2.2 Label elements

Signal Word
Danger

Hazard Statements
Causes skin irritation
Causes serious eye damage
Suspected of causing cancer
Combustible liquid

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling
Keep away from flames and hot surfaces. - No smoking

Precautionary Statements - Response
If exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor
IF ON SKIN: Wash with plenty of water and soap
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse
In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

2.3. Other Hazards Hazards not otherwise classified (HNOC)
Not Applicable

2.4 Other information
Not Applicable

Unknown Acute Toxicity < 1% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance
Mixture

Chemical Name	CAS-No	Weight %
Ethylene glycol monobutyl ether	111-76-2	20 - 30
TRISODIUM NTA	5064-31-3	1 - 5
Benzene,1,1-oxybis, tetrapropylene derivatives	119345-04-9	1 - 5
SODIUMXYLENE SULFONATE	1300-72-7	1 - 5

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice No information available.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact Wash skin with soap and water.

Inhalation Remove to fresh air.

Ingestion Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

5.2 Special hazards arising from the substance or mixture

Special Hazard
None known based on information supplied

Hazardous Combustion Products No information available.

Explosion Data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas.

6.2 Environmental precautions

See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

7.1 Precautions for safe handling

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Materials to Avoid No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Ethylene glycol monobutyl ether 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m³ S*	TWA: 20 ppm	TWA: 20 ppm TWA: 97 mg/m³	TWA: 20 ppm TWA: 97 mg/m³	TWA: 20 ppm

8.2 Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate.

Respiratory protection . NIOSH/MSHA approved respiratory protection should be worn if exposure is anticipated.

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	transparent
Color	light yellow
Odor	Almond
Odor Threshold	No information available

Property	Values	Remarks • Methods
pH	10.9	
Melting/freezing point		No information available
Boiling point/boiling range		No information available
Flash Point	71 °C / 160 °F	
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	1.028	
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content	~70%

10. Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Extremes of temperature and direct sunlight.

10.5 Incompatible Materials

None known based on information supplied.

10.6 Hazardous Decomposition Products

None known based on information supplied.

11. Toxicological information

11.1 Acute toxicity

Numerical measures of toxicity: Product Information

The following values are calculated based on chapter 3.1 of the GHS document

Unknown Acute Toxicity < 1% of the mixture consists of ingredient(s) of unknown toxicity

Oral LD50	2,120.00 mg/kg
Dermal LD50	7,148.00 mg/kg
LC50 (Dust/Mist)	170.60 mg/l
LC50 (Vapor)	53.00 mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethylene glycol monobutyl ether 111-76-2	470 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
TRISODIUM NTA 5064-31-3	920 mg/kg (Rat)	-	> 5 mg/L (Rat) 4 h
SODIUMXYLENE SULFONATE 1300-72-7	1000 mg/kg (Rat)	-	-

11.2 Information on toxicological effects

Skin corrosion/irritation
Product Information
• No information available
Component Information
• No information available

Serious eye damage/eye irritation
Product Information
• Causes serious eye damage
Component Information
• No information available

Respiratory or skin sensitization
Product Information
• No information available
Component Information
• No information available

Germ cell mutagenicity
Product Information
• No information available
Component Information
• No information available

Carcinogenicity
Product Information
• The table below indicates whether each agency has listed any ingredient as a carcinogen
Component Information
• Contains a known or suspected carcinogen

Reproductive toxicity
Product Information
• No information available

Component Information
• No information available

STOT - single exposure
No information available

STOT - repeated exposure

• May cause adverse liver effects

Other adverse effects
Product Information
• No information available
Component Information
• No information available

Aspiration hazard
Product Information
• No information available
Component Information
• No information available

12. Ecological information

12.1 Toxicity

Ecotoxicity No information available

2.54263 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Ethylene glycol monobutyl ether 111-76-2	-	LC50: 96 h Lepomis macrochirus 1490 mg/L static LC50: 96 h Lepomis macrochirus 2950 mg/L	EC50: 48 h Daphnia magna 1000 mg/L
TRISODIUM NTA 5064-31-3	-	LC50: 96 h Pimephales promelas 93 - 170 mg/L flow-through LC50: 96 h Lepomis macrochirus 175 - 225 mg/L static LC50: 96 h Lepomis macrochirus 252 mg/L LC50: 96 h Pimephales promelas 470 mg/L static LC50: 96 h Oryzias latipes 560 - 1000 mg/L LC50: 96 h Oryzias latipes 560 - 1000 mg/L semi-static LC50: 96 h Oncorhynchus mykiss 72 - 133 mg/L static LC50: 96 h Poecilia reticulata 560 - 1000 mg/L semi-static LC50: 96 h Poecilia reticulata 560 - 1000 mg/L LC50: 96 h Pimephales promelas 114 mg/L	LC50: 48 h Daphnia magna 560 - 1000 mg/L

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
Ethylene glycol monobutyl ether 111-76-2	0.81

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

DOT	Not regulated
MEX	Not regulated
IMDG	Not regulated
IATA	Not regulated

15. Regulatory information

15.1 International Inventories

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-
NZIoC	-

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL - Canadian Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %
Ethylene glycol monobutyl ether 111-76-2	1.0

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

16. Other information

NFPA	**Health Hazard** 3* 2	**Flammability** 2	**Instability** 0	**Physical and chemical hazards** -
HMIS	**Health Hazard** 3* 2	**Flammability** 2	**Physical Hazard** 0	**Personal protection** X

Legend:
ACGIH (American Conference of Governmental Industrial Hygienists)
Ceiling (C)
DOT (Department of Transportation)
EPA (Environmental Protection Agency)
IARC (International Agency for Research on Cancer)
International Air Transport Association (IATA)
International Maritime Dangerous Goods (IMDG)
NIOSH (National Institute for Occupational Safety and Health)
NTP (National Toxicology Program)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
Reportable Quantity (RQ)
Skin designation (S*)
STEL (Short Term Exposure Limit)
TLV® (Threshold Limit Value)
TWA (time-weighted average)

Revision Date 24-Aug-2016
Revision Note
No information available
Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet