Safety Data Sheet: FIRST STEP ADVANCED, MM

Supercedes Date 07/11/2012 **Issuing Date** 04/22/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name FIRST STEP ADVANCED, MM
Recommended use Cleaning agent Stripping solution
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 0750
Chemical nature Aqueous solution of surfactants and ethanolamine
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Blue **Physical State** Liquid **Odor** Glycol ether

GHS
Classification

Physical Hazards

Substances/mixtures corrosive to metal	Category 1

Health Hazard

Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1
Reproductive Toxicity	Category 2

Other hazards
None

Labeling
Signal Word
DANGER

Hazard Statements
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H361 - Suspected of damaging fertility or the unborn child
H290 - May be corrosive to metals

Precautionary Statements
P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear protective gloves, protective clothing and eye protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P260 - Do not breathe mist
P285 - In case of inadequate ventilation wear respiratory protection
P272 - Contaminated work clothing should not be allowed out of the workplace
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
P333 + P313 - If skin irritation or rash occurs, get medical attention
P363 - Wash contaminated clothing before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a physician
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P342 + P311 - If experiencing respiratory symptoms, call a physician
P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.
P406 - Store in a corrosion-resistant container.
P390 - Absorb spillage to prevent damage
P501 - Dispose of contents and container in accordance with applicable regulations.

6 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Propylene glycol monomethyl ether	107-98-2	7-13
Ethanolamine	141-43-5	5-10
Surfactant blend HMIRC #8666 NJTSRN 100104-1004, 100104-1424, 100104-1351	TRADE SECRET	3-7

4. FIRST AID MEASURES

General advice Do not get in eyes, on skin or on clothing. Do not breathe mist.

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.

Skin Contact Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

Inhalation Move to fresh air. In case of shortness of breath, give oxygen. If breathing has stopped, apply artificial respiration. Get medical attention immediately.

Ingestion Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

Notes to physician The product causes burns of eyes, skin and mucous membranes. Control of circulatory system, shock therapy if needed. May cause sensitization of susceptible persons.

5. FIRE-FIGHTING MEASURES

Flash Point > 201 °F / > 94 °C **Method** Seta closed cup

Flammability Limits in Air % Mixture. **Upper** 75 **Lower** 5

Suitable Extinguishing Media

Water spray. Dry chemical. Foam. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Material can create slippery conditions. Contact with metals may evolve flammable hydrogen gas.

Protective Equipment and Precautions for Firefighters

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

NFPA **Health** 3 **Flammability** 1 **Instability** 0

HMIS **Health** 3 **Flammability** 1 **Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

Neutralizing Agent Acetic acid, diluted.

7. HANDLING AND STORAGE

Handling Do not get in eyes, on skin or on clothing. Do not breathe mist.

Storage Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Metal containers must be lined. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

Storage Temperature **Minimum** 35 °F / 2 °C **Maximum** 120 °F / 49 °C

Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Propylene glycol monomethyl ether	TWA: 50 ppm STEL: 100 ppm	No data available	STEL 150 ppm STEL 540 mg/m^3 TWA: 100 ppm TWA: 360 mg/m^3
Ethanolamine	TWA: 3 ppm STEL: 6 ppm	TWA: 3 ppm TWA: 6 mg/m^3	30 ppm STEL 6 ppm STEL 15 mg/m^3 TWA: 3 ppm

			TWA: 8 mg/m^3
Surfactant blend HMIRC #8666 NJTSRN 100104-1004, 100104-1424, 100104-1351	No data available	No data available	No data available

Engineering Measures Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Skin Protection Wear suitable protective clothing, Impervious gloves.

Respiratory Protection In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	**Viscosity**	Non viscous
Color	Blue	**Odor**	Glycol ether
Odor Threshold	Not applicable	**Appearance**	Transparent
pH	12.4	**Specific Gravity**	1.008
Evaporation Rate	0.5 (Butyl acetate=1)	**Percent Volatile (Volume)**	93
VOC Content (%)	17.5	**VOC Photoreactive (Y/N)**	Yes
VOC Content (g/L)	176	**Vapor Pressure**	16.53 mmHg @ 70°F
Vapor Density	0.6 (Air = 1.0)	**Solubility**	Completely soluble
n-Octanol/Water Partition	No data available	**Melting Point/Range**	No data available
Decomposition Temperature	No data available	**Boiling Point/Range**	> 105 °F / 41 °C
Flammability (solid, gas)	No data available		
Flash Point	> 201 °F / > 94 °C	**Method**	Seta closed cup
Autoignition Temperature	No information available.		
Flammability Limits in Air %	Mixture.	**Upper** 75 **Lower** 5	

10. STABILITY AND REACTIVITY

Chemical Stability Stable. Hazardous polymerization does not occur.

Conditions to Avoid Keep away from open flames, hot surfaces, and sources of ignition

Incompatible Products Strong oxidizing agents, Reducing agents, Halogenated hydrocarbon, Aldehydes, Vinyl compounds, Ketones, Bases, Acids.

Hazardous Decomposition Products Ammonia, Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas, Sulfur oxides, Halogenated compounds, Thermal decomposition can lead to release of irritating gases and vapors, Hydrogen, by reaction with metals.

Possibility of Hazardous Reactions None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

Oral LD50 No information available

Dermal LD50 No information available

Inhalation LC50

Gas No information available

Mist No information available

Vapor No information available

Principle Route of Exposure Eye contact, Skin contact, Inhalation.

Primary Routes of Entry Inhalation, Skin Absorption, Ingestion.

Acute Effects

Eyes Corrosive to the eyes and may cause severe damage including blindness.

Skin Causes skin burns. May be absorbed through the skin in harmful amounts. May cause allergic skin reaction.

Inhalation Harmful by inhalation. Causes burns. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. May cause allergic respiratory reaction.

Ingestion If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. May be fatal if swallowed.

Chronic Toxicity Liver and kidney injuries may occur. May cause sensitization by skin contact. May cause sensitization by inhalation. Inhaled corrosive substances can lead to a toxic edema of the lungs. Contains a known or suspected reproductive toxin.

Target Organ Effects Liver, Kidney, Respiratory system, Central nervous system, Immune system, Reproductive System.
Aggravated Medical Conditions Respiratory disorders, Neurological disorders, Skin disorders, Kidney disorders, Liver disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Propylene glycol monomethyl ether	= 5200 mg/kg (Rat)	= 13 g/kg (Rabbit)	= 54.6 mg/L (Rat) 4 h	no data available	no data available
Ethanolamine	= 1720 mg/kg (Rat)	= 1 mL/kg (Rabbit)	no data available	no data available	no data available
Surfactant blend HMIRC #8666 NJTSRN 100104-1004, 100104-1424, 100104-1351	no data available	no data available	no data available	no data available	no data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Propylene glycol monomethyl ether	no data available	no data available	X	no data available	eyes, CNS, respiratory system, skin, liver, kidney
Ethanolamine	no data available	Skin sensitization, Respiratory sensitization	no data available	X	eyes, CNS, respiratory system, skin, liver, kidney, reproductive system, immune system
Surfactant blend HMIRC #8666 NJTSRN 100104-1004, 100104-1424, 100104-1351	no data available	no data available	no data available	no data available	no data available

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Propylene glycol monomethyl ether	not applicable	not applicable	not applicable	not applicable	not applicable
Ethanolamine	not applicable	not applicable	not applicable	not applicable	not applicable
Surfactant blend HMIRC #8666 NJTSRN 100104-1004, 100104-1424, 100104-1351	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Propylene glycol monomethyl ether	no data available	LC50 4600 - 10000 mg/L Leuciscus idus 96 h LC50 = 20.8 g/L Pimephales promelas 96 h	no data available	23300: 48 h Daphnia magna mg/L EC50	-0.437
Ethanolamine	EC50 = 15 mg/L Desmodesmus subspicatus 72 h	LC50 114 - 196 mg/L Oncorhynchus mykiss 96 h LC50 300 - 1000 mg/L Lepomis macrochirus 96 h LC50 = 227 mg/L Pimephales promelas 96 h LC50 = 3684 mg/L Brachydanio rerio 96 h LC50 > 200 mg/L Oncorhynchus mykiss 96 h	EC50 = 110 mg/L 17 h EC50 = 12200 mg/L 2 h EC50 = 13.7 mg/L 30 min	65: 48 h Daphnia magna mg/L EC50	-1.91
Surfactant blend HMIRC #8666 NJTSRN 100104-1004, 100104-1424, 100104-1351	no data available	no data available	no data available	no data available	N/A

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Amines, liquid, corrosive, n.o.s.

Hazard Class	8
UN-No	UN2735
Packing Group	II
Description	UN27385, Amines, liquid, corrosive, n.o.s.(Ethanolamine),8,PG II

TDG

Proper shipping name	Amines or polyamines, liquid, corrosive, n.o.s
Hazard Class	8
UN-No	UN2735
Packing Group	II

ICAO

UN-No	UN2735
Proper Shipping Name	Amines, liquid, corrosive, n.o.s.
Hazard Class	8
Packing Group	II
Shipping Description	UN2735, Amines, liquid, corrosive, n.o.s.,(Ethanolamine),8,PG II

IATA

UN-No	UN2735
Proper Shipping Name	Amines, liquid, corrosive, n.o.s.
Hazard Class	8
Packing Group	II
ERG Code	8L
Shipping Description	UN2735, Amines, liquid, corrosive, n.o.s.,(Ethanolamine),8,PG II

IMDG/IMO

Proper Shipping Name	Amines, liquid, corrosive, n.o.s.
Hazard Class	8
UN-No	UN2735
Packing Group	II
EmS No.	F-A, S-B
Shipping Description	UN2735, Amines, liquid, corrosive, n.o.s.(Ethanolamine),8,PG II

15. REGULATORY INFORMATION

Inventories

TSCA	Complies
DSL	Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Propylene glycol monomethyl ether	Not applicable	Not applicable
Ethanolamine	Not applicable	Not applicable
Surfactant blend HMIRC #8666 NJTSRN 100104-1004, 100104-1424, 100104-1351	Not applicable	Not applicable

16. OTHER INFORMATION

Prepared By	Devon Kebodeaux
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Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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