

SAFETY DATA SHEET

Issue Date 27-Oct-2014 Revision Date 6-Sept-2022 Version 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name RESTORE LF

Other means of identification

Product Code 224 UN/ID No. UN1824 Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Metal safe, low foam, spray cleaner.

Uses advised against No information available

Manufacturer Address

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard statements

Causes serious eye damage Causes skin irritation





Appearance aqueous solution

Physical state liquid

Odor None

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see Section 4 on this label)

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/physician

IF ON SKIN (or hair): Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Hazards not otherwise classified (HNOC)

Other Information

May cause respiratory irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Dipropylene Glycol Methyl Ether	34590-94-8	7 - 13	
Sodium hydroxide	1310-73-2	3 - 7	
TSRN5890	Proprietary	1 - 5	

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

4. FIRST AID MEASURES

First aid measures

Eye contact Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete

rinsing. Get immediate medical attention.

Skin Contact Flush with water for 15 minutes. If irritation persists after rinsing, get medical attention.

Remove contaminated clothing and wash before reuse.

Inhalation Remove victim to fresh air. If breathing difficulty occurs or persists, get medical attention.

Ingestion Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate

medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing

or unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms Causes irritation (possibly severe) to the eyes. May cause permanent eye damage. Causes

irritation to the skin. Causes irritation (possibly severe) nausea, vomiting to the

gastrointestinal tract. May cause respiratory tract irritation. The severity of effects depend

on concentration and how soon after exposure the area is washed.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog). Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical

If the stock solution container breaks, the solution should be handled with care as it is corrosive. Closed containers may rupture (due to buildup of pressure) when exposed to extreme heat.

Explosion data

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

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. Use water spray to cool fire exposed containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection

equipment.

Environmental precautions See Section 12 for additional ecological information.

Methods for containmentCompletely contain spilled material with dikes or sand bags, etc.

Methods for cleaning up Recover as much material as possible into containers for disposal or reuse. Remaining

material may be diluted with water and neutralized. Flush spill area with water. Neutralization products, both solid and liquid, must be recovered for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest.

Wash thoroughly after handling. Wear protective clothing/equipment. Use with adequate

ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed and properly labeled. Containers that have been emptied will

retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or

consume foods, beverages, tobacco in areas where this product is stored.

Incompatible materials Strong acids. Oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Dipropylene Glycol Methyl Ether 34590-94-8	STEL: 150 ppm TWA: 100 ppm S*	TWA: 100 ppm TWA: 600 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 600 mg/m³ (vacated) STEL: 150 ppm (vacated) STEL: 900 mg/m³ (vacated) S*	IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m³ STEL: 150 ppm STEL: 900 mg/m³
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m ³	S* (vacated) Ceiling: 2 mg/m³	IDLH: 10 mg/m3 Ceiling: 2 mg/m3

Appropriate engineering controls

Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection If contact is anticipated, wear protective clothing appropriate to use conditions.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance aqueous solution Odor None

 Color
 Clear colorless or light yellow
 Odor threshold
 No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 11.8 1% Solution

Melting point/freezing point
Boiling point / boiling range
Flash point
Evaporation rate
Flammability (solid, gas)

No information available
No information available
No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
No information available

Specific Gravity 1.065-1.085
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 Kinematic viscosity No information available **Dynamic viscosity** No information available **Explosive properties** No information available Oxidizing properties No information available

Other Information

Softening point
Molecular weight
VOC Content (%)
Density
No information available

10. STABILITY AND REACTIVITY

224 RESTORE LF

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong acids. Oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO2). Ammonia. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information No data available

Inhalation May cause respiratory irritation.

Eye contact Moderately irritating to the eyes. Risk of serious damage to eyes.

Skin Contact Contact causes severe skin irritation.

Ingestion Ingestion may cause stomach irritation with stomach discomfort.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dipropylene Glycol Methyl Ether 34590-94-8	= 5230 mg/kg (Rat)	= 9500 mg/kg (Rabbit)	•
Sodium hydroxide 1310-73-2	= 1350 mg/kg (Rat)	-	-
TSRN5890	= 1300 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo information available.Reproductive toxicityNo information available.STOT - single exposureNo information available.STOT - repeated exposureNo information available.Aspiration hazardNo information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 100% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Dipropylene Glycol Methyl Ether	-	10000: 96 h Pimephales promelas	1919: 48 h Daphnia magna mg/L
34590-94-8		mg/L LC50 static	LC50
Sodium hydroxide	-	45.4: 96 h Oncorhynchus mykiss	-
1310-73-2		mg/L LC50 static	
TSRN5890	-	301 - 478: 96 h Lepomis	-
		macrochirus mg/L LC50 3185: 96 h	
		Brachydanio rerio mg/L LC50	
		semi-static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Dipropylene Glycol Methyl Ether	-0.064
34590-94-8	

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

Chemical Name	California Hazardous Waste Status
Sodium hydroxide	Toxic
1310-73-2	Corrosive

14. TRANSPORT INFORMATION

Sodium Hydroxide Solution

Regulated DOT

UN/ID No. UN1824

Proper shipping name Hazardous ingredients

Hazard Class 8

Packing Group Ш

15. REGULATORY INFORMATION

International Inventories

TSCA Complies Complies **DSL/NDSL**

224 RESTORE LF

EINECS/ELINCS Complies

ENCS Does not comply

IECSCCompliesKECLCompliesPICCSCompliesAICSComplies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified 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

US 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 Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %	
Dipropylene Glycol Methyl Ether - 34590-94-8	1.0	

SARA 311/312 Hazard Categories

Skin corrosion/irritation

Serious eye damage/eye irritation

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide 1310-73-2	1000 lb	-	-	Х

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium hydroxide	1000 lb	-	RQ 1000 lb final RQ
1310-73-2			RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Dipropylene Glycol Methyl Ether 34590-94-8	X	X	X
Sodium hydroxide 1310-73-2	Х	X	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA Health hazards 2 Flammability 0 Instability 0 Physical and Chemical

Properties -

HMIS Health hazards 2 Flammability 0 Physical hazards 0 Personal protection X

Prepared By Imt

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 6-Sept-2022

Revision Note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet