

Safety Data Sheet

SFF-10 AL

SDS Revision Date:

12/12/2022



1. Identification

1.1. Product identifier

Product Identity

SFF-10 AL

Alternate Names

55-008, Blended Formula, SFF-10 AL HD Exterior Body Cleaner & Iron Stain Remover for Trains & Buses- 55 gallon

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

Intended use

It is used on steel and aluminum bodies and surfaces.

Application Method

Read all precautions and instructions carefully before and after use.

1.3. Details of the supplier of the safety data sheet

Company Name

ComStar International Inc.
20-47 128th Street,
College Point, NY 11356

Telephone No.

718-445-7900
800-328-0142
Fax: 718-353-5998

Emergency 24 HR response No: 1-800-424-9300 & 703-527-3887 CHEMTREC

Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure, or accident. Please direct all other inquiries to our customer service phone number.

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Skin Irrit. 2; H315 Causes skin irritation

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Warning

[Prevention]:

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P271 Use only outdoors or in a well-ventilated area.

[Response]:

P312 Call a poison center or doctor / physician if you feel unwell.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

[Storage]:

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No GHS storage statements

[Disposal]:

No GHS disposal statements

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
SURFACTANT CAS # 94441-92-6	N/A	N/A	
DIPROPYLENE GLYCOL MONOMETHYL ETHER CAS # 34590-94-8	100 ppm	Eye irrit 2B,	

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General	If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. Get medical attention immediately if symptom occur.
Eyes	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview	Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting.
Notes to Physician	Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

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Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Combustible material. Containers may explode when heated.

5.3. Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO₂).

5.4. Advice for fire-fighters

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

ERG Guide No. ---

6. Accidental release measures

6.1. Personal precautions, protective equipment, and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

6.2. Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Remove all sources of ignition.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Avoid contact with skin, eyes, or clothing. Avoid ingestion and inhalation. Ensure adequate ventilation. Keep away from open flames, hot surfaces, and sources of ignition.

Hygiene Measures

When using do not eat, drink, or smoke. Provide regular cleaning of equipment, work area and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep away from heat, sparks, and flame. Store under an inert atmosphere. Protect from moisture.

7.3. Specific end use(s)

No data available.

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8. Exposure controls and personal protection

8.1. Control parameters

Exposure limits

List source(s): EU - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC UK - EH40/2005 Work Exposure Limits, Third edition. Published 2018. IRE - 2018 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	The United Kingdom	European Union	Ireland
Dipropylene glycol monomethyl ether	STEL: 150 ppm 15 min STEL: 924 mg/m ³ 15 min TWA: 50 ppm 8 hr TWA: 308 mg/m ³ 8 hr Skin	TWA: 50 ppm (8h) TWA: 308 mg/m ³ (8h) Skin	TWA: 50 ppm 8 hr. TWA: 308 mg/m ³ 8 hr. STEL: 150 ppm 15 min STEL: 924 mg/m ³ 15 min Skin

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region-specific regulatory bodies.

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS70 General methods for sampling airborne gases and vapours.

Derived No Effect Level (DNEL) No information available

Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral Dermal Inhalation				

Predicted No Effect Concentration (PNEC) No information available.

CAS No.	Ingredient	Source	Value
34590-94-8	DIPROPYLENE GLYCOL MONOMETHYL ETHER	OSHA	100 ppm
		ACGIH	100 ppm
		NIOSH	TWA 100 ppm (600 mg/m ³) ST 150 ppm (900 mg/m ³) [skin]
		Supplier	No Established Limit
94441-92-6	SURFACTANT	OSHA	No Established Limit
		ACGIH	No Established Limit

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		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
34590-94-8	DIPROPYLENE GLYCOL MONOMETHYL ETHER	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
94441-92-6	SURFACTANT	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Engineering Measures

None under normal use conditions. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles) (European standard - EN166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber Neoprene Natural rubber PVC	See manufacturers recommendations	---	EN 374	(Minimum requirement)

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g., sensitization effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection

No protective equipment is needed under normal use conditions.

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Large scale/emergency use A NIOSH/MSHA or European Standard EN 136 approved respirators if exposure limits are exceeded or if irritation or other symptoms are experienced
Recommended Filter type: Particle filter 2

Small scale/Laboratory use Maintain adequate ventilation
Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN141

Environmental exposure controls No information available

9. Physical and chemical properties

Appearance	Yellowish tint Liquid
Odor	Mild ethereal odor
Odor threshold	Not Measured
pH	6
Melting point / freezing point	-80°C / -112°F
Initial boiling point and boiling range	180°C / 356°F
Flash Point	90°C / 194°F
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: 1.3 Vol% Upper Explosive Limit: 10.4 Vol%
Vapor pressure (Pa)	0.4 mmHg @ 25°C
Vapor Density	Not Measured
Specific Gravity	>1
Solubility in Water	Complete
Solubility in other solvents	No information available
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	270°C / 518°F
Decomposition temperature	No data available
Viscosity (cSt)	25°C/77°F: NA
Volatiles (% by weight)	NA
Octanol/Water Partition Coefficient	NA

9.2. Other information

Molecular Formula	C7 H16 O3
Molecular Weight	148.20
Explosive Properties	explosive air/vapour mixtures possible

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10. Stability and reactivity

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Hygroscopic

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Keep away from open flames, hot surfaces, and sources of ignition. Incompatible products. Excess heat. Exposure to moist air or water.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO₂).

11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information

See actual entry in RTECS for complete information.

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met

Dermal Based on available data, the classification criteria are not met

Inhalation Based on available data, the classification criteria are not met

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
DIPROPYLENE GLYCOL MONOMETHYL ETHER (34590-94-8)	LD50 = 5.35 g/kg (Rat)	LD50 = 9500 mg/kg (Rabbit)	---
SURFACTANT (94441-92-6)	Not Applicable	Not Applicable	---

(b) skin corrosion/irritation;

Based on available data, the classification criteria are not met

(c) serious eye damage/irritation;

Based on available data, the classification criteria are not met

(d) respiratory or skin sensitization;

Respiratory

Based on available data, the classification criteria are not met

Skin

Based on available data, the classification criteria are not met

(e) germ cell mutagenicity;

Based on available data, the classification criteria are not met

met

Not mutagenic in AMES Test

(f) carcinogenicity;

Based on available data, the classification criteria are not met
There are no known carcinogenic chemicals in this product

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- (g) **reproductive toxicity;** Based on available data, the classification criteria are not met
- (h) **STOT-single exposure;** Based on available data, the classification criteria are not met
- (i) **STOT-repeated exposure;** Based on available data, the classification criteria are not met
Target Organs None known.
- (i) **aspiration hazard;** Based on available data, the classification criteria are not met

Other Adverse Effects The toxicological properties have not been fully investigated.

Symptoms / effects, both acute and delayed

Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting.

11.2. Information on other hazards

Endocrine Disrupting Properties

Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

12. Ecological information

12.1. Toxicity

Aquatic Ecotoxicity

Do not empty into drains.

Component	Freshwater Fish	Water Flea
DIPROPYLENE GLYCOL MONOMETHYL ETHER (34590-94-8)	Pimephales promelas: LC50 >10000 mg/L/96h	LC50: = 1919 mg/L, 48h (Daphnia magna)
SURFACTANT (94441-92-6)	Not Applicable	Not Applicable

12.2. Persistence and degradability

Readily biodegradable, Persistence is unlikely

12.3. Bioaccumulative potential

Bioaccumulation is unlikely

12.4. Mobility in soil

The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.

12.5. Results of PBT and vPvB assessment

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).

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12.6. Endocrine disrupting properties

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects Persistent Organic Pollutant

This product does not contain any known or suspected substance

12.8. Ozone Depletion Potential

This product does not contain any known or suspected substance

13. Disposal considerations

13.1. Waste treatment methods

Waste from Residues/Unused Products

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Contaminated Packaging

Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.

European Waste Catalogue (EWC)

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

Other Information

Waste codes should be assigned by the user based on the application for which the product was used.

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Regulated	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable

14.5. Environmental hazards

IMDG Marine Pollutant: No

14.6. Special precautions for user

No further information

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15. Regulatory information

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

International Inventories

X = listed, Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), China (IECSC), Japan (ENCS), Australia (AICS), Korea (ECL).

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Dipropylene glycol monomethyl ether	252-104-2	---		X	X	---	X	X	X	X	KE-12230

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

National Regulations

WGK Classification See table for values

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Dipropylene glycol monomethyl ether	WGK1	

Component	France - INRS (Tables of occupational diseases)
Dipropylene glycol monomethyl ether	Tableaux des maladies professionnelles (TMP) - RG 84

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

16. Other information

Full text of H-Statements referred to under sections 2 and 3

CAS - Chemical Abstracts Service
Substances Control inventory

Legend

TSCA - United States Toxic

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

Domestic Substances List/Non-Domestic

PICCS - Philippines Inventory of Chemicals and Chemical Substances and New Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances Inventory of Chemicals

WEL - Workplace Exposure Limit Average

ACGIH - American Conference of Governmental Industrial Hygienists for Research on Cancer

DNEL - Derived No Effect Level (PNEC)

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration Octanol:Water

PBT - Persistent, Bioaccumulative, Toxic Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

MARPOL - International Convention for the Prevention of Pollution from Ships

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chem advisor - LOLI, Merck index, RTECS

DSL/NDSL - Canadian Substances List

ENCS - Japanese Existing

AICS - Australian Inventory

NZIoC - New Zealand

TWA - Time Weighted

IARC - International Agency

Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

POW - Partition coefficient

vPvB - very Persistent, very

ATE - Acute Toxicity Estimate
VOC (volatile organic compound)

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

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