Sun Lab - Express spray SPF50

Safety Data Sheet

According to SANS 10234:2008 and SANS 11014:2010

Issue date:19/02/2021 Revision date: 20/02/2023 : Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Sun Lab - Express spray SPF50
Type of product	:	Sunscreen products
Product code	:	89942, 145307, 161491, 145308, 170576
Product group	:	Trade product

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

No additional information available

1.3. Supplier's details

Manufacturer
Shield Chemicals (Pty) Ltd
9 London Rd
Apex
P.O. Box 1939
1501 Benoni - South Africa
T (011) 421 7111
info@shieldchem.co.za

1.4. Emergency telephone number

Emergency number : (011) 421 7111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Aerosol, Category 1	H222;H229
Serious eye damage/eye irritation, Category 2A	H319
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401

Full text of H statements : see section 16

2.2. Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS-ZA) :

GHS02 GHS07

Signal word (GHS-ZA) : Danger

Hazardous ingredients : (3,3,5-trimethylcyclohexyl) 2-hydroxybenzoate; Ethylhexyl salicylate; octocrilene; Butylmethoxy dibenzoylmethane; Ethanol; propane; butane, liquefied, under pressure

Hazard statements (GHS-ZA) :
H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H319 - Causes serious eye irritation.
H401 - Toxic to aquatic life

Precautionary statements (GHS-ZA) :
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P251 - Do not pierce or burn, even after use.
P264 - Wash hands, forearms and face thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Pressurised container: May burst if heated,Extremely flammable aerosol,Causes serious eye irritation,Toxic to aquatic life

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
Ethanol		40.0 - 50.0	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Acute Tox. Not classified (Inhalation:dust,mist) Eye Irrit. 2A, H319 Aquatic Acute Not classified
butane, liquefied, under pressure	(CAS-No.) 106-97-8	10.0 - 20.0	Pyr. Gas Not classified Flam. Gas 1, H220 Aquatic Acute 2, H401
octocrilene	(CAS-No.) 6197-30-4	5.0 - 10.0	Flam. Liq. Not classified Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 STOT RE Not classified Aquatic Acute 1, H400
propane	(CAS-No.) 74-98-6	5.0 - 10.0	Pyr. Gas Not classified Flam. Gas 1, H220 Aquatic Acute Not classified
(3,3,5-trimethylcyclohexyl) 2-hydroxybenzoate	(CAS-No.) 118-56-9	5.0 - 10.0	Flam. Liq. Not classified Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Aquatic Acute 3, H402
Ethylhexyl salicylate	(CAS-No.) 118-60-5	1.0 - 5.0	Flam. Liq. Not classified Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) STOT RE Not classified Aquatic Acute 2, H401
Butylmethoxy dibenzoylmethane	(CAS-No.) 70356-09-1	1.0 - 5.0	Acute Tox. Not classified (Oral) STOT RE Not classified Aquatic Acute 1, H400

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after eye contact : Eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Extremely flammable aerosol.

Explosion hazard : Pressurised container: May burst if heated.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

propane (74-98-6)	
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Propane
OEL TWA (mg/m³)	1800 mg/m³
OEL TWA (ppm)	1000 ppm
Regulatory reference	Government Notice No. R 904

butane, liquefied, under pressure (106-97-8)	
South Africa - Occupational Exposure Limits (Recommended Limits)	
Local name	Butane
OEL TWA (mg/m³)	1430 mg/m³
OEL TWA (ppm)	600 ppm
OEL STEL (mg/m³)	1780 mg/m³
OEL STEL (ppm)	750 ppm
Regulatory reference	Government Notice. R: 1179
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	n-Butane
OEL TWA (mg/m³)	1430 mg/m³
OEL TWA (ppm)	600 ppm
OEL STEL (mg/m³)	1780 mg/m³
OEL STEL (ppm)	750 ppm
Regulatory reference	Government Notice No. R 904

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Liquid.
Colour	:	Light yellow.
Odour	:	characteristic.
Odour threshold	:	No data available
pH	:	No data available
pH solution	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Extremely flammable aerosol.
Vapour pressure	:	No data available
Vapour pressure at 50 °C	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Relative density of saturated gas/air mixture	:	No data available
Density	:	No data available
Relative gas density	:	No data available
Solubility	:	No data available
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Pressurised container: May burst if heated.
Oxidising properties	:	No data available
Explosive limits	:	No data available
Lower explosive limit (LEL)	:	No data available
Upper explosive limit (UEL)	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified

Acute toxicity (inhalation) : Not classified

(3,3,5-trimethylcyclohexyl) 2-hydroxybenzoate (118-56-9)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Ethylhexyl salicylate (118-60-5)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

octocrilene (6197-30-4)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

Butylmethoxy dibenzoylmethane (70356-09-1)	
LD50 oral rat	> 16000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

Ethanol	
LD50 oral rat	10470 mg/kg
LD50 dermal rabbit	> 15800 mg/kg
LC50 inhalation rat (mg/l)	51 mg/l/4h

propane (74-98-6)	
LC50 inhalation rat (ppm)	> 800000 ppm (15 minutes, Rat, Male / female, Experimental value, Inhalation (gases))

butane, liquefied, under pressure (106-97-8)	
LC50 inhalation rat (mg/l)	1442.738 - 1443 mg/l 15 MIN
LC50 inhalation rat (ppm)	800000 ppm 15 MIN

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Ethylhexyl salicylate (118-60-5)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

octocrilene (6197-30-4)	
LOAEL (oral, rat, 90 days)	340 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	175 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Butylmethoxy dibenzoylmethane (70356-09-1)	
LOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEL (oral, rat, 90 days)	450 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	360 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Aspiration hazard : Not classified

Sun Lab - Express spray SPF50	
Vaporizer	Aerosol

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life.

Hazardous to the aquatic environment, short-term (acute) : Toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Not classified

(3,3,5-trimethylcyclohexyl) 2-hydroxybenzoate (118-56-9)	
LC50 fish 1	> 82 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 Daphnia 1	> 100 mg/l Test organisms (species): Daphnia magna

Ethylhexyl salicylate (118-60-5)	
LC50 fish 1	> 82 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 Daphnia 1	10 mg/l Test organisms (species): Daphnia magna

octocrilene (6197-30-4)	
EC50 Daphnia 1	> 0.023 mg/l Test organisms (species): Daphnia magna
EC50 72h algae (1)	> 220 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

Butylmethoxy dibenzoylmethane (70356-09-1)	
LC50 fish 1	> 0.03 mg/l Test organisms (species): Cyprinus carpio
EC50 Daphnia 1	> 0.03 mg/l Test organisms (species): Daphnia magna

Ethanol	
LC50 fish 1	11.2 mg/l
EC50 Daphnia 1	5012 mg/l
Bioconcentration factor (BCF REACH)	< 10

propane (74-98-6)	
LC50 fish 1	24 mg/l (96 h, Pisces, Literature study)
LC50 fish 2	49.9 mg/l (96 h, Pisces, Fresh water, QSAR)
EC50 Daphnia 1	7 mg/l (48 h, Daphnia magna, Literature study)
BCF fish 1	9 - 25 (Pisces, QSAR)
Log Pow	1.09 - 2.8 (Experimental value, 20 °C)

butane, liquefied, under pressure (106-97-8)	
LC50 fish 1	> 1000 mg/l (96 h, Pimephales promelas, QSAR)
EC50 72h algae (1)	5.3 - 5.5 mg/l (Algae, QSAR)
Log Pow	2.89 (Experimental value)

12.2. Persistence and degradability

Sun Lab - Express spray SPF50	
Persistence and degradability	No additional information available

Ethanol	
Chemical oxygen demand (COD)	2.04 g O_2/g substance

propane (74-98-6)	
Persistence and degradability	Readily biodegradable in water.

butane, liquefied, under pressure (106-97-8)	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

Sun Lab - Express spray SPF50	
Bioaccumulative potential	No additional information available

Ethanol	
Bioconcentration factor (BCF REACH)	See section 12.1 on ecotoxicology

propane (74-98-6)	
BCF fish 1	See section 12.1 on ecotoxicology
Log Pow	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

butane, liquefied, under pressure (106-97-8)	
Log Pow	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

Sun Lab - Express spray SPF50	
Mobility in soil	No additional information available

Ethanol	
Mobility in soil	1

propane (74-98-6)	
Surface tension	0.016 N/m (-47 °C)
Log Pow	See section 12.1 on ecotoxicology
Ecology - soil	Not applicable (gas).

butane, liquefied, under pressure (106-97-8)	
Surface tension	< 0.1 N/m (0 °C)
Log Pow	See section 12.1 on ecotoxicology
Ecology - soil	Not applicable (gas).

12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
1950	1950	1950
14.2. Proper Shipping Name		
AEROSOLS	AEROSOLS	Aerosols, flammable
14.3. Transport hazard class(es)		
2.1	2.1	2.1
		Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No :	Dangerous for the environment : No
No supplementary information available		

14.6. Special precautions for user

- SANS

Special provisions (SANS) : 63, 190

Limited quantities (SANS) : See SP277

Limited quantities (SANS) : See SP277

Packagings, large packagings and IBCs Packing instructions (SANS) : P003

Packagings, large packagings and IBCs Special packing instructions (SANS) : PP17, PP87

- IMDG

Special provisions (IMDG) : 63, 190, 277, 327, 344, 381, 959

Packing instructions (IMDG) : P207, LP200

Special packing provisions (IMDG) : PP87, L2

EmS-No. (Fire) : F-D - FIRE SCHEDULE Delta - FLAMMABLE GASES

EmS-No. (Spillage) : S-U - SPILLAGE SCHEDULE Uniform - GASES (FLAMMABLE, TOXIC OR CORROSIVE)

Stowage category (IMDG) : None

- IATA

PCA Excepted quantities (IATA) : E0

PCA Limited quantities (IATA) : Y203

PCA limited quantity max net quantity (IATA) : 30kgG

PCA packing instructions (IATA)	:	203
PCA max net quantity (IATA)	:	75kg
CAO packing instructions (IATA)	:	203
CAO max net quantity (IATA)	:	150kg
Special provisions (IATA)	:	A145, A167, A802
ERG code (IATA)	:	10L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health, and environmental national regulations specific for the product

No additional information available

SECTION 16: Other information

Issue date	:	19/02/2021
Revision date	:	20/02/2023

Full text of H-statements:

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects.

SDS South Africa

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.