



SAFETY DATA SHEET

1. Identification

Product identifier 410 Smart Shield
Other means of identification SS-D200CP (410)
Recommended use Clear coat protection for vehicle wash
Recommended restrictions None known.
Manufacturer/Importer/Supplier/Distributor information
Manufacturer
Company name Smart Solutions
Address 12 Corporate Plaza Dr Suite 150
Newport Beach, Ca 92660
Telephone 949-722-4500
E-mail Not available.
Emergency phone number 800-424-9300 CHEMTREC

2. Hazard(s) identification

Physical hazards Flammable liquids Category 3
Health hazards Acute toxicity, oral Category 4
Acute toxicity, dermal Category 3
Acute toxicity, inhalation Category 2
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2
Carcinogenicity Category 1B
Specific target organ toxicity, repeated exposure Category 1
Environmental hazards Not classified.
OSHA defined hazards Not classified.
Label elements
Hazard symbol None.
Signal word None.
Hazard statement Causes serious eye irritation. Causes skin irritation.
Precautionary statement
Prevention Not available.
Response If eye irritation persists: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Storage Store away from direct sunlight or ultraviolet light. Keep container tightly closed when not in use. Store in a dry place. Protect from atmospheric moisture.
Disposal Not available.
Hazard(s) not otherwise classified (HNOC) Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.
Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
DISTILLATES (PETROLEUM), HYDROTREATED MIDDLE		64742-46-7	38.4
ETHANOL, 2-BUTOXY-		111-76-2	16.8
2-PROPANOL		67-63-0	8.816

Chemical name	Common name and synonyms	CAS number	%
AMIDES, COCO, N,N-BIS(HYDROXYETHYL)		68603-42-9	1.5
ETHANOL, 2-CHLORO-		107-07-3	0.8
1,2-PROPANEDIOL		57-55-6	0.04
CYCLOPENTASILOXANE, 2,2,4,4,6,6,8,8,10,10-DECAMETHY L-		541-02-6	0.0016
CYCLOTETRAILOXANE, 2,2,4,4,6,6,8,8-OCTAMETHYL-		556-67-2	0.0008
Other components below reportable levels			33.6416

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Not available.
Skin contact	Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Remove contaminated clothing.
Eye contact	If eye irritation persists: Get medical advice/attention.
Ingestion	Not available.
Most important symptoms/effects, acute and delayed	Skin irritation. May cause redness and pain.

5. Fire-fighting measures

Suitable extinguishing media	Alcohol resistant foam. Powder.
Unsuitable extinguishing media	Not available.
Specific hazards arising from the chemical	Not applicable.
Special protective equipment and precautions for firefighters	Not available.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Do not touch or walk through spilled material.
Methods and materials for containment and cleaning up	Use water spray to reduce vapors or divert vapor cloud drift.
Environmental precautions	Not available.

7. Handling and storage

Precautions for safe handling	Avoid contact with eyes.
Conditions for safe storage, including any incompatibilities	Store away from direct sunlight or ultraviolet light. Keep container tightly closed when not in use. Store in a dry place. Protect from atmospheric moisture.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-PROPANOL (CAS 67-63-0)	PEL	980 mg/m3
ETHANOL, 2-BUTOXY- (CAS 111-76-2)	PEL	400 ppm 240 mg/m3
ETHANOL, 2-CHLORO- (CAS 107-07-3)	PEL	50 ppm 16 mg/m3
		5 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
2-PROPANOL (CAS 67-63-0)	STEL	400 ppm
ETHANOL, 2-BUTOXY- (CAS 111-76-2)	TWA	200 ppm
	TWA	20 ppm
ETHANOL, 2-CHLORO- (CAS 107-07-3)	Ceiling	1 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
2-PROPANOL (CAS 67-63-0)	STEL	1225 mg/m3
ETHANOL, 2-BUTOXY- (CAS 111-76-2)	TWA	500 ppm
		980 mg/m3
		400 ppm
ETHANOL, 2-CHLORO- (CAS 107-07-3)	Ceiling	24 mg/m3
		5 ppm
		3 mg/m3
		1 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	Form
1,2-PROPANEDIOL (CAS 57-55-6)	TWA	10 mg/m3	Aerosol.
CYCLOPENTASILOXANE, 2,2,4,4,6,6,8,8,10,10-DECA METHYL- (CAS 541-02-6)	TWA	10 ppm	
CYCLOTETRASILOXANE, 2,2,4,4,6,6,8,8-OCTAMETH YL- (CAS 556-67-2)	TWA	10 ppm	

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
2-PROPANOL (CAS 67-63-0)	40 mg/l	Acetone	Urine	*
ETHANOL, 2-BUTOXY- (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines**US - California OELs: Skin designation**

ETHANOL, 2-BUTOXY- (CAS 111-76-2) Can be absorbed through the skin.
 ETHANOL, 2-CHLORO- (CAS 107-07-3) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

ETHANOL, 2-BUTOXY- (CAS 111-76-2) Skin designation applies.
 ETHANOL, 2-CHLORO- (CAS 107-07-3) Skin designation applies.

US - Tennessee OELs: Skin designation

ETHANOL, 2-BUTOXY- (CAS 111-76-2) Can be absorbed through the skin.
 ETHANOL, 2-CHLORO- (CAS 107-07-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

ETHANOL, 2-CHLORO- (CAS 107-07-3) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

ETHANOL, 2-BUTOXY- (CAS 111-76-2) Can be absorbed through the skin.
 ETHANOL, 2-CHLORO- (CAS 107-07-3) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

ETHANOL, 2-BUTOXY- (CAS 111-76-2) Can be absorbed through the skin.
 ETHANOL, 2-CHLORO- (CAS 107-07-3) Can be absorbed through the skin.

Appropriate engineering controls Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

The following are recommendations for Personnel Protective Equipment (PPE). The employer/user of this product must perform a Hazard Assessment of the workplace according to OSHA regulations 29 CFR 1910.132 to determine the appropriate PPE for use while performing any task involving potential exposure to this product.

Eye/face protection Not available.

Skin protection

Hand protection Not available.

Other Not available.

Respiratory protection Not available.

Thermal hazards Not available.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Color CLEAR PALE YELLOW

Odor STRONG GLYCOL ETHER

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range 281.46 °F (138.59 °C) estimated

Flash point 91.0 °F (32.8 °C)

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 7.22 lbs/gal
 0.87 g/ml

Flammability class Flammable IC estimated

Percent volatile 26.46 % estimated

Specific gravity 0.87

VOC 26.46 % estimated

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Not available.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point.
Incompatible materials	Acids. Chlorine. Isocyanates.
Hazardous decomposition products	Not available.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Not available.
Skin contact	Causes skin irritation.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

Eye contact	Causes serious eye irritation.
Ingestion	Not available.

Symptoms related to the physical, chemical and toxicological characteristics
Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
2-PROPANOL (CAS 67-63-0)		
<u>Acute</u>		
Oral		
LD50	Rat	4.7 g/kg
ETHANOL, 2-BUTOXY- (CAS 111-76-2)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	400 mg/kg
Oral		
LD50	Rat	560 mg/kg
ETHANOL, 2-CHLORO- (CAS 107-07-3)		
<u>Acute</u>		
Oral		
LD50	Rat	58 mg/kg

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not available.
Skin sensitization	Not available.

Germ cell mutagenicity	Not available.
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Carcinogenicity	Risk of cancer cannot be excluded with prolonged exposure.
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IARC Monographs. Overall Evaluation of Carcinogenicity

AMIDES, COCO, N,N-BIS(HYDROXYETHYL) (CAS 68603-42-9)	2B Possibly carcinogenic to humans.
ETHANOL, 2-BUTOXY- (CAS 111-76-2)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Not available.

Specific target organ toxicity - single exposure Not available.

Specific target organ toxicity - repeated exposure Not available.

Aspiration hazard Not available.

Chronic effects May be harmful if absorbed through skin.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

12. Ecological information

Ecotoxicity

Components		Species	Test Results
1,2-PROPANEDIOL (CAS 57-55-6)			
Aquatic			
Crustacea	EC50	Water flea (<i>Daphnia magna</i>)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)	710 mg/l, 96 hours
2-PROPANOL (CAS 67-63-0)			
Aquatic			
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>)	> 1400 mg/l, 96 hours
ETHANOL, 2-BUTOXY- (CAS 111-76-2)			
Aquatic			
Fish	LC50	Inland silverside (<i>Menidia beryllina</i>)	1250 mg/l, 96 hours
ETHANOL, 2-CHLORO- (CAS 107-07-3)			
Aquatic			
Crustacea	EC50	Water flea (<i>Daphnia magna</i>)	187 - 275 mg/l, 48 hours
Fish	LC50	Goldfish (<i>Carassius auratus</i>)	16.8 - 21.7 mg/l, 96 hours

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

1,2-PROPANEDIOL	-0.92
2-PROPANOL	0.05
CYCLOPENTASILOXANE,	5.2
2,2,4,4,6,6,8,8,10,10-DECAMETHYL-	
ETHANOL, 2-BUTOXY-	0.83
ETHANOL, 2-CHLORO-	-0.06

Mobility in soil Not available.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation potential.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number UN2924
UN proper shipping name FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. (2-PROPANOL, QUATERNARY AMMONIUM COMPOUNDS)
Transport hazard class(es)
Class 3
Subsidiary risk 8
Packing group II
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
ERG number 132
Transportation information on packaging may be different from that listed.

IATA

UN number UN2924
UN proper shipping name FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. (2-PROPANOL, QUATERNARY AMMONIUM COMPOUNDS)
Transport hazard class(es)
Class 3
Subsidiary risk 8
Packing group II
Environmental hazards No.
ERG Code 132
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

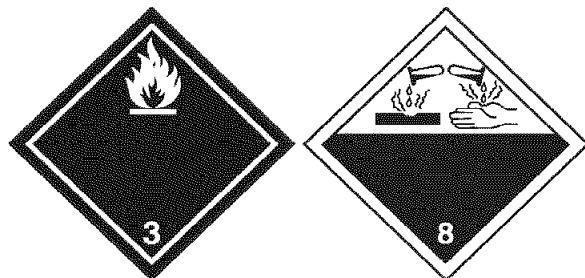
IMDG

UN number UN1219
UN proper shipping name ISOPROPANOL (ISOPROPYL ALCOHOL) SOLUTION (2-PROPANOL)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group II
Environmental hazards
Marine pollutant No.
EmS F-E, S-D
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

DOT



IATA



IMDG



15. Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

CYCLOTETRAILOXANE, 2,2,4,4,6,6,8,8-OCTAMETHYL- (CAS 556-67-2) 1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

ETHANOL, 2-CHLORO- (CAS 107-07-3) 500 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
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ETHANOL, 2-CHLORO-	107-07-3	500	500		
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SARA 311/312 Hazardous chemical

Classified hazard categories	Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation Carcinogenicity Specific target organ toxicity (single or repeated exposure) Hazard not otherwise classified (HNOX)
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SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
ETHANOL, 2-BUTOXY-	111-76-2	16.8

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

2-PROPANOL (CAS 67-63-0) Low priority

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

2-PROPANOL (CAS 67-63-0)
AMIDES, COCO, N,N-BIS(HYDROXYETHYL) (CAS 68603-42-9)
CYCLOPENTASILOXANE, 2,2,4,4,6,6,8,8,10,10-DECAMETHYL- (CAS 541-02-6)
CYCLOTETRAISILOXANE, 2,2,4,4,6,6,8,8-OCTAMETHYL- (CAS 556-67-2)
DISTILLATES (PETROLEUM), HYDROTREATED MIDDLE (CAS 64742-46-7)
ETHANOL, 2-BUTOXY- (CAS 111-76-2)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Toxic Chemical Substances (TCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 09-05-2019
Version # 01
HMIS® ratings Health: 3*
Flammability: 3
Physical hazard: 0

NFPA ratings Health: 2
Flammability: 3
Instability: 0

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