

Issue Date 23-Jun-2016

Revision Date 23-Jun-2016

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name Matrix Release for S-SPOTKIT

Other means of identification

Product Code S565-12OZ-KIT

Synonyms None

Details of the supplier of the safety data sheet

Company Name Jon-Don
400 Medinah Road
Roselle, IL 60172
(630) 893-4747

Emergency telephone number

Emergency Telephone INFOTRAC 1-800-535-5053

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Serious eye damage/eye irritation	Category 2

Label elements

Emergency Overview

Warning

Hazard statements

Causes serious eye irritation



Appearance Clear

Physical state Liquid

Odor Solvent

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

Specific Treatment (See Section 4 on the SDS)

IF IN EYES: 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

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
2-(2-butoxyethoxy)ethanol	112-34-5	3-7	*
2-Propanol	67-63-0	1-5	*

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

4. FIRST AID MEASURES

First aid measures

Skin Contact

Wash off immediately with plenty of water. Wash skin with soap and water.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Inhalation

Remove to fresh air.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms

Any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No Information available.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-(2-butoxyethoxy)ethanol 112-34-5	TWA: 10 ppm inhalable fraction and vapor	-	-
2-Propanol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³
Hexylene Glycol 107-41-5	Ceiling: 25 ppm	(vacated) Ceiling: 25 ppm (vacated) Ceiling: 125 mg/m ³	Ceiling: 25 ppm Ceiling: 125 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

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 Wear protective gloves and protective clothing.

Respiratory protection Ensure adequate ventilation, especially in confined areas. 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 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	Clear
Color	Colorless
Odor	Solvent
Odor threshold	No Information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	9.5 - 10.5	
Specific Gravity	0.988	
Viscosity	< 25 cP @ 25°C	
Melting point/freezing point	No Information available	
Flash point	Above 200°F	
Boiling point / boiling range	100 °C / 212 ° F Degrees	
Evaporation rate	No Information available	
Flammability (solid, gas)	No data available	
Flammability Limits in Air		
Upper flammability limit:	No Information available	
Lower flammability limit:	No Information available	
Vapor pressure	No Information available	
Vapor density	No Information available	
Water solubility	Complete	
Partition coefficient	No Information available	
Autoignition temperature	No Information available	
Decomposition temperature	No Information available	

Other Information

Density Lbs/Gal	8.23
VOC Content (%)	10.43

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Maybe harmful by inhalation, ingestion, in contact with eyes and skin,

Inhalation

Avoid breathing vapors or mists. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Eye contact	Avoid contact with eyes. Direct contact may cause serious eye irritation.
Skin Contact	Avoid contact with skin. Prolonged or repeated contact may dry skin and cause irritation. May be absorbed through the skin in harmful amounts.
Ingestion	Harmful if swallowed. Ingestion may cause irritation to mucous membranes.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-(2-butoxyethoxy)ethanol 112-34-5	= 5660 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-
2-Propanol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms No Information available.

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

Sensitization No Information available.
Germ cell mutagenicity No Information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Propanol 67-63-0	-	Group 3	-	X

IARC (International Agency for Research on Cancer)

Group 3 -Not classifiable as a human carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No Information available.
STOT - single exposure No Information available.
STOT - repeated exposure No Information available.
Target organ effects EYES, Respiratory system, Skin.
Aspiration hazard No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	23,292.00
ATEmix (dermal)	30,300.00
ATEmix (inhalation-dust/mist)	1,815.00

12. ECOLOGICAL INFORMATION**Ecotoxicity**

1.05% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-(2-butoxyethoxy)ethanol 112-34-5	100: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	1300: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static	2850: 24 h <i>Daphnia magna</i> mg/L EC50 100: 48 h <i>Daphnia magna</i> mg/L EC50
2-Propanol 67-63-0	1000: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50 1000: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	1400000: 96 h <i>Lepomis macrochirus</i> µg/L LC50 11130: 96 h <i>Pimephales promelas</i> mg/L LC50 static 9640: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through	13299: 48 h <i>Daphnia magna</i> mg/L EC50
Sodium Lauryl Sulfate 151-21-3	3.59 - 15.6: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static 53: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 30 - 100: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50 117: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	4.5: 96 h <i>Lepomis macrochirus</i> mg/L LC50 10.8 - 16.6: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 1.31: 96 h <i>Cyprinus carpio</i> mg/L LC50 semi-static 5.8 - 7.5: 96 h <i>Pimephales promelas</i> mg/L LC50 static 10.2 - 22.5: 96 h <i>Pimephales promelas</i> mg/L LC50 semi-static	1.8: 48 h <i>Daphnia magna</i> mg/L EC50

		22.1 - 22.8: 96 h Pimephales promelas mg/L LC50 static 4.3 - 8.5: 96 h Oncorhynchus mykiss mg/L LC50 static 8 - 12.5: 96 h Pimephales promelas mg/L LC50 static 15 - 18.9: 96 h Pimephales promelas mg/L LC50 static 4.62: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 4.2: 96 h Oncorhynchus mykiss mg/L LC50 7.97: 96 h Brachydanio rerio mg/L LC50 flow-through 9.9 - 20.1: 96 h Brachydanio rerio mg/L LC50 semi-static 4.06 - 5.75: 96 h Lepomis macrochirus mg/L LC50 static 4.2 - 4.8: 96 h Lepomis macrochirus mg/L LC50 flow-through 6.2 - 9.6: 96 h Pimephales promelas mg/L LC50 13.5 - 18.3: 96 h Poecilia reticulata mg/L LC50 semi-static	
Hexylene Glycol 107-41-5	-	10500 - 11000: 96 h Pimephales promelas mg/L LC50 flow-through 10000: 96 h Lepomis macrochirus mg/L LC50 static 8690: 96 h Pimephales promelas mg/L LC50 flow-through 10700: 96 h Pimephales promelas mg/L LC50 static	2700 - 3700: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No Information available.

Bioaccumulation

Bioaccumulative potential.

Chemical Name	Partition coefficient
2-Propanol 67-63-0	0.05

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.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
2-Propanol 67-63-0	Toxic Ignitable

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT Not regulated**TDG** Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies

Legend:

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

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

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or 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 %
2-(2-butoxyethoxy)ethanol - 112-34-5	1.0
2-Propanol - 67-63-0	1.0

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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)

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

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
2-(2-butoxyethoxy)ethanol 112-34-5	X	-	-
2-Propanol 67-63-0	X	X	X
Hexylene Glycol 107-41-5	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties Yes
HMIS	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection B

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Revision Note

No Information available

Disclaimer

The information provided in this 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

Issue Date 23-Jun-2016

Revision Date 23-Jun-2016

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name Matrix Target for S-SPOTKIT

Other means of identification

Product Code S578-12OZ-KIT

Synonyms None

Details of the supplier of the safety data sheet

Company Name Jon-Don
400 Medinah Road
Roselle, IL 60172
(630) 893-4747

Emergency telephone number

Emergency Telephone INFOTRAC 1-800-535-5053

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if swallowed

Toxic in contact with skin

Causes severe skin burns and eye damage



Appearance Clear

Physical state Liquid

Odor Acidic

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

Specific Treatment (See Section 4 on the SDS)

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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Immediately call a POISON CENTER or doctor/physician

Drink 2-3 glasses of water or milk.

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information**

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Ammonium Fluoride	12125-01-8	1-5	*
Hydrochloric Acid	7647-01-0	1-5	*
Hydrofluoric Acid	7664-39-3	.1-1	*

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

4. FIRST AID MEASURES

First aid measures**General advice**

Immediate medical attention is required.

Skin Contact

Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Eye contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.

Inhalation

Remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion

Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately.

Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ammonium Fluoride 12125-01-8	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³ F TWA: 2.5 mg/m ³ dust (vacated) TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³ F
Hydrochloric Acid 7647-01-0	Ceiling: 2 ppm	(vacated) Ceiling: 5 ppm (vacated) Ceiling: 7 mg/m ³ Ceiling: 5 ppm Ceiling: 7 mg/m ³	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m ³
Hydrofluoric Acid 7664-39-3	TWA: 0.5 ppm F TWA: 2.5 mg/m ³ F S* Ceiling: 2 ppm F	TWA: 3 ppm F TWA: 2.5 mg/m ³ F TWA: 2.5 mg/m ³ dust (vacated) TWA: 3 ppm F (vacated) TWA: 2.5 mg/m ³ (vacated) STEL: 6 ppm F	IDLH: 30 ppm Ceiling: 6 ppm 15 min Ceiling: 5 mg/m ³ 15 min TWA: 3 ppm TWA: 2.5 mg/m ³

NIOSH IDLH *Immediately Dangerous to Life or Health*

Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls**Engineering Controls**

Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Tight sealing safety goggles. Face protection shield.

Skin and body protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection

Ensure adequate ventilation, especially in confined areas. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators or air purifying respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Colorless
Odor	Acidic
Odor threshold	No Information available

Property	Values	Remarks • Method
pH	<1	
Specific Gravity	1.01	
Viscosity	<25 cP @ 25°C	

Melting point/freezing point	No Information available
Flash point	None
Boiling point / boiling range	est 210 ° F
Evaporation rate	No Information available
Flammability (solid, gas)	No data available
Flammability Limits in Air	
Upper flammability limit:	No Information available
Lower flammability limit:	No Information available
Vapor pressure	No Information available
Vapor density	No Information available
Water solubility	Complete
Partition coefficient	No Information available
Autoignition temperature	No Information available
Decomposition temperature	No Information available

Other Information

Density Lbs/Gal	8.42
VOC Content (%)	Not Applicable

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Exposure to air or moisture over prolonged periods.

Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Product Information	Harmful by inhalation, ingestion, in contact with eyes and skin.
Inhalation	Avoid breathing vapors or mists. Breathing of vapor can cause respiratory irritation and inflammation. Breathing of mist or liquid can cause burns to the respiratory tract.
Eye contact	Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including blindness.
Skin Contact	Toxic in contact with skin. Corrosive. Contact with skin may cause severe irritation and burns.
Ingestion	Harmful if swallowed. May be fatal if swallowed. Can burn mouth, throat, and stomach. Ingestion causes acute irritation and burns to the mucous membranes of the mouth, trachea, esophagus and stomach.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric Acid 7647-01-0	= 700 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h
Hydrofluoric Acid 7664-39-3	-	-	= 0.79 mg/L (Rat) 1 h

Information on toxicological effects

Symptoms No Information available.

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

Sensitization No Information available.

Germ cell mutagenicity No Information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ammonium Fluoride 12125-01-8	-	Group 3	-	-
Hydrochloric Acid 7647-01-0	-	Group 3	-	X

IARC (International Agency for Research on Cancer)

Group 3 -Not classifiable as a human carcinogen

Reproductive toxicity No Information available.

STOT - single exposure No Information available.

STOT - repeated exposure No Information available.

Chronic toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure.

Possible risk of irreversible effects.

Target organ effects EYES, Respiratory system, Skin.

Aspiration hazard No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	661.00
ATEmix (dermal)	728.00
ATEmix (inhalation-gas)	55,883.15
ATEmix (inhalation-dust/mist)	5.48

12. ECOLOGICAL INFORMATION**Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Ammonium Fluoride 12125-01-8	-	364.0: 96 h Pimephales promelas mg/L LC50 static	-
Hydrochloric Acid 7647-01-0	-	282: 96 h Gambusia affinis mg/L LC50 static	-
Hydrofluoric Acid 7664-39-3	-	660: 48 h Leuciscus idus mg/L LC50	270: 48 h Daphnia species mg/L EC50

Persistence and degradability

No Information available.

Bioaccumulation

Bioaccumulative potential.

Chemical Name	Partition coefficient
Hydrofluoric Acid 7664-39-3	-1.4

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	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Hydrofluoric Acid 7664-39-3	U134	-	-	U134

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Ammonium Fluoride 12125-01-8	Toxic Corrosive

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT

UN/ID No.	UN2922
Proper shipping name	Corrosive liquids, toxic, n.o.s.
Hazard Class	8
Subsidiary class	6.1
Packing Group	III
Special Provisions	IB3, T7, TP1, TP28
Description	UN2922, Corrosive liquids, toxic, n.o.s. (contains Hydrochloric Acid and Ammonium Bifluoride), 8, 6.1, III
Emergency Response Guide Number	154

TDG

UN/ID No.	UN2922
Proper shipping name	Corrosive liquids, toxic, n.o.s.
Hazard Class	8
Subsidiary class	6.1
Packing Group	III
Description	UN2922, Corrosive liquids, toxic, n.o.s. (contains Hydrochloric Acid and Ammonium Bifluoride), 8, 6.1, III

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies

Legend:

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

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

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or 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 %
Ammonium Fluoride - 12125-01-8	1.0
Hydrochloric Acid - 7647-01-0	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated 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
Ammonium Fluoride 12125-01-8	100 lb	-	-	X
Hydrochloric Acid 7647-01-0	5000 lb	-	-	X
Hydrofluoric Acid 7664-39-3	100 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ammonium Fluoride 12125-01-8	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ
Hydrochloric Acid 7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ
Hydrofluoric Acid 7664-39-3	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 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
Ammonium Fluoride 12125-01-8	X	X	X
Hydrochloric Acid 7647-01-0	X	X	X
Hydrofluoric Acid 7664-39-3	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA	Health hazards 3	Flammability 0	Instability 0	Physical and Chemical Properties Yes
HMIS	Health hazards 3	Flammability 0	Physical hazards 0	Personal protection C

Issue Date 23-Jun-2016

Revision Date 23-Jun-2016

Revision Note

No Information available

Disclaimer

The information provided in this 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

Issue Date 23-Jun-2016

Revision Date 23-Jun-2016

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION**Product identifier****Product Name** Matrix Breakdown for S-SPOTKIT**Other means of identification****Product Code** S598-12OZ-KIT**Synonyms** None**Details of the supplier of the safety data sheet****Company Name** Jon-Don
400 Medinah Road
Roselle, IL 60172
(630) 893-4747**Emergency telephone number****Emergency Telephone** INFOTRAC 1-800-535-5053**2. HAZARDS IDENTIFICATION****Classification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 5
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements**Emergency Overview****Danger****Hazard statements**Harmful if swallowed
May be harmful in contact with skin
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause genetic defects
May cause cancer
May be fatal if swallowed and enters airways
Flammable liquid and vapor

**Appearance** Clear**Physical state** Liquid**Odor** Solvent**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ventilating/lighting/equipment.
 Use only non-sparking tools
 Take precautionary measures against static discharge

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 Specific Treatment (See Section 4 on the SDS)
 IF IN EYES: 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
 If skin irritation occurs: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Rinse mouth
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information**

- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

Unknown Acute Toxicity

1.5% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Tetrachloroethene	127-18-4	10-30	*
2-butoxyethanol	111-76-2	10-30	*
Solvent Naptha (Petroleum), Light Aromatic	64742-95-6	7-13	*
1,2,4-Trimethylbenzene	95-63-6	5-10	*
1,3,5-Trimethylbenzene	108-67-8	1-5	*

Xylene	1330-20-7	1-5	*
Cumene	98-82-8	1-5	*

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

4. FIRST AID MEASURES

First aid measures

General advice	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
Skin Contact	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Immediate medical attention is not required.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Inhalation	Remove to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms	Any additional important symptoms and effects are described in Section 11: Toxicology Information.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Flammable.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment as required. Evacuate personnel to safe areas. Keep
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people away from and upwind of spill/leak. Remove all sources of ignition.

Environmental precautions

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Pick up and transfer to properly labeled containers. Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Soak up with inert absorbent material. Dam up.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

Incompatible materials

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
Tetrachloroethene 127-18-4	STEL: 100 ppm TWA: 25 ppm	TWA: 100 ppm (vacated) TWA: 25 ppm (vacated) TWA: 170 mg/m ³ Ceiling: 200 ppm	IDLH: 150 ppm
1,2,4-Trimethylbenzene 95-63-6	-	-	TWA: 25 ppm TWA: 125 mg/m ³
1,3,5-Trimethylbenzene 108-67-8	-	-	TWA: 25 ppm TWA: 125 mg/m ³
Xylene 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 655 mg/m ³	-
Cumene 98-82-8	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 245 mg/m ³ (vacated) S* S*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m ³
Potassium Hydroxide 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

NIOSH IDLH *Immediately Dangerous to Life or Health*

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection Ensure adequate ventilation, especially in confined areas. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators or air purifying respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended. 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 Clear
Color Colorless
Odor Solvent
Odor threshold No Information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not an Aqueous Solution	
Specific Gravity	1.019	
Viscosity	<25 cP @ 25°C	
Melting point/freezing point	No Information available	
Flash point	58 °C 136 °F	
Boiling point / boiling range	100 °C / 212 °F Degrees	/
Evaporation rate	No Information available	
Flammability (solid, gas)	No data available	
Flammability Limits in Air		
Upper flammability limit:	No Information available	
Lower flammability limit:	No Information available	
Vapor pressure	No Information available	
Vapor density	No Information available	
Water solubility	Complete	
Partition coefficient	No Information available	
Autoignition temperature	No Information available	
Decomposition temperature	No Information available	

Other Information

Density Lbs/Gal 8.50
VOC Content (%) 59.5

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Harmful by inhalation, ingestion, in contact with eyes and skin.

Inhalation

Avoid breathing vapors or mists. Breathing of vapor can cause respiratory irritation and inflammation. Breathing of mist or liquid can cause burns to the respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

Eye contact

Avoid contact with eyes. Contact with eyes may cause irritation or burns. Vapor may cause irritation.

Skin Contact

Avoid contact with skin. Corrosive. May cause severe irritation or burns to the skin. Prolonged or repeated contact may cause absorption to the skin.

Ingestion

Harmful if swallowed. Ingestion causes acute irritation and burns to the mucous membranes of the mouth, trachea, esophagus and stomach.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Tetrachloroethene 127-18-4	= 2629 mg/kg (Rat)	-	= 27.8 mg/L (Rat) 4 h
2-butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 99 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
Solvent Naptha (Petroleum), Light Aromatic 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
1,2,4-Trimethylbenzene 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m ³ (Rat) 4 h
1,3,5-Trimethylbenzene 108-67-8	= 5000 mg/kg (Rat)	-	= 24 g/m ³ (Rat) 4 h
Xylene 1330-20-7	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit) > 1700 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h
Cumene 98-82-8	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	> 3577 ppm (Rat) 6 h = 39000 mg/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms

No Information available.

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

Sensitization

No Information available.

Germ cell mutagenicity

No Information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Tetrachloroethene	A3	Group 2A	Reasonably Anticipated	X

127-18-4				
2-butoxyethanol 111-76-2	A3	Group 3	-	-
Xylene 1330-20-7	-	Group 3	-	-
Cumene 98-82-8	-	Group 2B	Reasonably Anticipated	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity	No Information available.
STOT - single exposure	No Information available.
STOT - repeated exposure	No Information available.
Chronic toxicity	Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.
Target organ effects	Blood, Central nervous system, EYES, hematopoietic system, Kidney, Liver, Respiratory system, Skin.
Aspiration hazard	No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 1.5% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	1,522.00 mg/kg
ATEmix (dermal)	3,181.00 mg/kg
ATEmix (inhalation-dust/mist)	4.00 mg/l
ATEmix (inhalation-vapor)	1,867.00 mg/l

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT.

Ecotoxicity

2.5% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-butoxyethanol 111-76-2	-	1490: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 2950: 96 h <i>Lepomis macrochirus</i> mg/L LC50	1000: 48 h <i>Daphnia magna</i> mg/L EC50 1698 - 1940: 24 h <i>Daphnia magna</i> mg/L EC50
Tetrachloroethene 127-18-4	500: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	4.73 - 5.27: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 12.4 - 14.4: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 11.0 - 15.0: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 8.6 - 13.5: 96 h <i>Pimephales promelas</i> mg/L LC50 static	6.1 - 9.0: 48 h <i>Daphnia magna</i> mg/L EC50 Static
Solvent Naptha (Petroleum), Light Aromatic 64742-95-6	-	9.22: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50	6.14: 48 h <i>Daphnia magna</i> mg/L EC50
1,2,4-Trimethylbenzene 95-63-6	-	7.19 - 8.28: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through	6.14: 48 h <i>Daphnia magna</i> mg/L EC50
1,3,5-Trimethylbenzene 108-67-8	-	3.48: 96 h <i>Pimephales promelas</i> mg/L LC50	50: 24 h <i>Daphnia magna</i> mg/L EC50
Cumene 98-82-8	2.6: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	6.04 - 6.61: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 4.8: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 2.7: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50	0.6: 48 h <i>Daphnia magna</i> mg/L EC50 7.9 - 14.1: 48 h <i>Daphnia magna</i> mg/L EC50 Static

		semi-static 5.1: 96 h Poecilia reticulata mg/L LC50 semi-static	
Xylene 1330-20-7	-	7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static 30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 semi-static 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 13.4: 96 h Pimephales promelas mg/L LC50 flow-through 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 780: 96 h Cyprinus carpio mg/L LC50 19: 96 h Lepomis macrochirus mg/L LC50	0.6: 48 h Gammarus lacustris mg/L LC50 3.82: 48 h water flea mg/L EC50
Potassium Hydroxide 1310-58-3	-	80: 96 h Gambusia affinis mg/L LC50 static	-

Persistence and degradability

No Information available.

Bioaccumulation

Bioaccumulative potential.

Chemical Name	Partition coefficient
Tetrachloroethene 127-18-4	2.53 - 2.88
2-butoxyethanol 111-76-2	0.81
1,2,4-Trimethylbenzene 95-63-6	3.63
Xylene 1330-20-7	2.77 - 3.15
Cumene 98-82-8	3.55

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	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Tetrachloroethene 127-18-4	U210	Included in waste streams: F001, F002, F024, F025, F039, K016, K019, K020, K073, K116, K150, K151	0.7 mg/L regulatory level	U210
Cumene 98-82-8	-	-	-	U055
Xylene 1330-20-7	-	Included in waste stream: F039	-	U239

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Tetrachloroethene 127-18-4	Category I - Volatiles	-	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from	-

			the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	
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This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Tetrachloroethene 127-18-4	Toxic
Xylene 1330-20-7	Toxic Ignitable
Cumene 98-82-8	Toxic Ignitable

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT

UN/ID No.	UN1992
Proper shipping name	Flammable liquids, toxic, n.o.s.
Hazard Class	3
Subsidiary class	6.1
Packing Group	III
Special Provisions	B1, IB3, T7, TP1, TP28
Marine pollutant	This product contains a chemical which is listed as a marine pollutant according to DOT.
Description	UN1992, Flammable liquids, toxic, n.o.s. (Petroleum Distillates, Tetrachloroethylene), 3, 6.1, III
Emergency Response Guide Number	131

TDG

UN/ID No.	UN1992
Proper shipping name	Flammable liquids, toxic, n.o.s.
Hazard Class	3
Subsidiary class	6.1
Packing Group	III
Marine pollutant	This product contains a chemical which is listed as a marine pollutant according to TDG.
Description	UN1992, Flammable liquids, toxic, n.o.s. (Petroleum Distillates, Tetrachloroethylene), 3, 6.1, III

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or 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 %
2-butoxyethanol - 111-76-2	1.0
Tetrachloroethene - 127-18-4	0.1
1,2,4-Trimethylbenzene - 95-63-6	1.0
Cumene - 98-82-8	1.0
Xylene - 1330-20-7	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated 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
Tetrachloroethene 127-18-4	-	X	X	-
Xylene 1330-20-7	100 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Tetrachloroethene 127-18-4	100 lb 1 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
Xylene 1330-20-7	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ
Cumene 98-82-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Tetrachloroethene - 127-18-4	Carcinogen
Cumene - 98-82-8	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-butoxyethanol 111-76-2	X	X	X
Tetrachloroethene 127-18-4	X	X	X
1,2,4-Trimethylbenzene 95-63-6	X	X	X
Cumene 98-82-8	X	X	X
Xylene 1330-20-7	X	X	X
Diethylbenzene 25340-17-4	X	-	-
Potassium Hydroxide 1310-58-3	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA	Health hazards 2	Flammability 2	Instability 0	Physical and Chemical Properties Yes
HMIS	Health hazards 2	Flammability 2	Physical hazards 0	Personal protection B

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Revision Note

No Information available

Disclaimer

The information provided in this 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