Quik-Shield Dragon

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)
Issue date: 1/12/2024 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Product name	:	Quik-Shield Dragon
Other means of identification	:	Polyurethane Resin B-side

1.2. Recommended use and restrictions on use

Use of the substance/mixture	:	B Component for Spray-Applied Polyurethane Foam

1.3. Supplier

SWD Urethane
539 S Drew Street
Mesa, AZ 85210
T (800) 828-1394

1.4. Emergency telephone number

Emergency number	:	Chemtrec (800) 424-9300 [24 HOURS]

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral) Category 4	Harmful if swallowed
Skin corrosion/irritation Category 1B	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	Causes serious eye damage

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger

Hazard statements (GHS US) : Harmful if swallowed
Causes severe skin burns and eye damage
Causes serious eye damage

Precautionary statements (GHS US) : Do not breathe mist, spray, vapors.
Wash hands, forearms and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective clothing, eye protection, face protection.
If swallowed: Call a POISON CENTER, a doctor if you feel unwell.
If swallowed: rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
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, a doctor.
Rinse mouth.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
TCPP	CAS-No.: 13674-84-5	20 – 27
Bis-DMAPA	CAS-No.: 6711-48-4	5 – 10
Alcohols, C9-11, ethoxylated	CAS-No.: 68439-46-3	1 – 5
Undecan-1-ol, ethoxylated	CAS-No.: 34398-01-1	0.5 – 3
2-[2-(dimethylamino)ethoxy]ethanol	CAS-No.: 1704-62-7	0.5 – 3

The specific chemical\ component identities and/or the exact component percentages of this material may be withheld as trade secrets.
This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact : Burns.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Burns.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
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

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe mist, spray, vapors.

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".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe mist, spray, vapors. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. 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

Technical measures : Keep in a cool, well-ventilated place away from heat.
Storage conditions : Store locked up.
Maximum storage period : 6 months
Storage temperature : 50 – 90 °F (10-32 °C)
Packaging materials : Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Quik-Shield Dragon
No additional information available

Alcohols, C9-11, ethoxylated (68439-46-3)
No additional information available

Undecan-1-ol, ethoxylated (34398-01-1)
No additional information available

TCPP (13674-84-5)
No additional information available

Bis-DMAPA (6711-48-4)
No additional information available

2-[2-(dimethylamino)ethoxy]ethanol (1704-62-7)
No additional information available

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/Personal protective equipment

Personal protective equipment:
Wear recommended personal protective equipment.

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

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear.

Color	:	White Cream
Odor	:	characteristic
Odor threshold	:	No data available
pH	:	11.3
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	> 212 °F (100 °C)
Flash point	:	> 200 °F (93 °C)
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability	:	Not applicable.
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Density	:	1.06 g/ml
Solubility	:	Moderately soluble in water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	300 ± 100 cP
Explosion limits	:	No data available
Explosive properties	:	Not explosive.
Oxidizing properties	:	No data available.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Harmful if swallowed.
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Quik-Shield Dragon	
ATE US (oral)	1854.553 mg/kg body weight

Alcohols, C9-11, ethoxylated (68439-46-3)	
LD50 oral rat	1378 mg/kg Source: Corporate Solution From Thomson Micromedex
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	2000 mg/kg Source: Corporate Solution From Thomson Micromedex
LC50 Inhalation - Rat	> 1.6 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
ATE US (oral)	1378 mg/kg body weight
ATE US (dermal)	2000 mg/kg body weight

Undecan-1-ol, ethoxylated (34398-01-1)	
LD50 dermal rabbit	> 2000 mg/kg Source: Butch Company
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

TCPP (13674-84-5)	
LD50 dermal rabbit	> 2000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE US (oral)	500 mg/kg body weight

Bis-DMAPA (6711-48-4)	
LD50 oral rat	1250 – 1600 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EPA OTS 798.1175 (Acute Oral Toxicity)
LD50 dermal rabbit	500 – 1000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE US (oral)	1250 mg/kg body weight
ATE US (dermal)	500 mg/kg body weight

2-[2-(dimethylamino)ethoxy]ethanol (1704-62-7)	
ATE US (dermal)	1100 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns.
pH: 11.3

Serious eye damage/irritation : Causes serious eye damage.
pH: 11.3

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

TCPP (13674-84-5)	
LOAEL (animal/female, F0/P)	99 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)
NOAEL (animal/male, F0/P)	85 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)

Bis-DMAPA (6711-48-4)	
NOAEL (animal/male, F0/P)	50 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Alcohols, C9-11, ethoxylated (68439-46-3)	
NOAEL (oral,rat,90 days)	≥ 500 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Bis-DMAPA (6711-48-4)	
LOAEL (oral,rat,90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEL (oral,rat,90 days)	50 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEL (subchronic,oral,animal/male,90 days)	750 mg/kg body weight Animal: , Animal sex: male
NOAEL (subchronic,oral,animal/female,90 days)	250 mg/kg body weight Animal: , Animal sex: female

2-[2-(dimethylamino)ethoxy]ethanol (1704-62-7)	
NOAEL (oral,rat,90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Alcohols, C9-11, ethoxylated (68439-46-3)	
LC50 - Fish [1]	8.5 mg/l Source: ECOTOX
EC50 - Crustacea [1]	2.686 mg/l Source: ECOTOX

Undecan-1-ol, ethoxylated (34398-01-1)	
LC50 - Fish [1]	3.9 mg/l Source: ECOTOX

TCPP (13674-84-5)	
LC50 - Fish [1]	51 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	131 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	5.2 mg/l Test organisms (species): other:

Bis-DMAPA (6711-48-4)	
LC50 - Fish [1]	21.4 – 47 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	50.3 mg/l Test organisms (species): Daphnia magna
LOEC (chronic)	6.06 mg/l Test organisms (species): Daphnia magna Duration: '22 d'
NOEC (chronic)	3.64 mg/l Test organisms (species): Daphnia magna Duration: '22 d'

2-[2-(dimethylamino)ethoxy]ethanol (1704-62-7)	
LC50 - Fish [1]	> 464 mg/l Test organisms (species): Leuciscus idus
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
LC50 - Fish [2]	≈ 320 mg/l Test organisms (species): Leuciscus idus

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Undecan-1-ol, ethoxylated (34398-01-1)	
Partition coefficient n-octanol/water (Log Pow)	4 Source: EPISUITE

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector’s sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

DOT NA No : UN3267
UN-No. (IMDG) : 3267
UN-No. (IATA) : 3267

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Corrosive liquid, basic, organic, n.o.s. (CONTAINS : Bis-DMAPA ; 2-[2-(dimethylamino)ethoxy]ethanol)
Proper Shipping Name (IMDG) : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS : Bis-DMAPA ; 2-[2-(dimethylamino)ethoxy]ethanol)
Proper Shipping Name (IATA) : Corrosive liquid, basic, organic, n.o.s. (CONTAINS : Bis-DMAPA ; 2-[2-(dimethylamino)ethoxy]ethanol)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 8
Hazard labels (DOT) : 8

IMDG

Transport hazard class(es) (IMDG) : 8

Hazard labels (IMDG) : 8

IATA

Transport hazard class(es) (IATA) : 8

Hazard labels (IATA) : 8

14.4. Packing group

Packing group (DOT) : II

Packing group (IMDG) : II

Packing group (IATA) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No.(DOT) : UN3267

DOT Special Provisions (49 CFR 172.102) : B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.
IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3)
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 30 L

DOT Vessel Stowage Location	:	B - (i) The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) ‘‘On deck only’’ on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
DOT Vessel Stowage Other	:	40 - Stow ‘‘clear of living quarters’’,52 - Stow ‘‘separated from’’ acids

IMDG

Special provision (IMDG)	:	274
Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T11
Tank special provisions (IMDG)	:	TP2, TP27
EmS-No. (Fire)	:	F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	:	S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	:	B
Properties and observations (IMDG)	:	Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.

IATA

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y840
PCA limited quantity max net quantity (IATA)	:	0.5L
PCA packing instructions (IATA)	:	851
PCA max net quantity (IATA)	:	1L
CAO packing instructions (IATA)	:	855
CAO max net quantity (IATA)	:	30L
Special provision (IATA)	:	A3, A803
ERG code (IATA)	:	8L

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. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

ICSDS_SDS_USA

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.