

PRODUCT NAME

Tuff-Flex® WU

Camouflage, Chemical Resistant Coating

MANUFACTURER

Gemite® Products Inc.

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The Advanced Materials Centre

por ta tion or stor age. Do not ap ply di rectly over ex ist ing paint un less tested prior to use. These coat ings are made to ex act ing speci fi ca tions, not only for physi cal and ap pear ance prop er ties but also for re quired in fra- red prop er ties nec es sary in cam ou- flag ing. It is es sen tial that the coat ings be well mixed and care- fully ap plied to pre vent vari ance in these prop er ties.

Health and Safety

Tuff- Flex WU is a wa ter borne ma te rial. Han dle it in the same man ner as a wa ter based paints. Avoid eye con tact. Keep out of reach of chil dren. Con sult MSDS for ad di tional in for ma tion.

Colors

These fin ishes con form to NATO re quire ments and spe cifi cally to Canadian and American requirements according to D-80-001-149/SF-001 and MIL-C-53072B (ME), re spec tively. Such fin ishes are avail able in a range of NATO Colors in cluding NATO Green and the 383 Woodland Color Series (Brown, Green, Black) and the 686 De sert Se ries (Tan, Sand, Grey). The coat ing is also avail able in po lar white color.

Packaging

Prod uct is a one com po nent ready to use liq uid avail able in 200 kg open head drums. Other pack ag ing avail able upon re quest.

Coverage

Prod uct is high op ac ity and should only be ap plied, with out di lu tion, at ap pro xi ma tely 1-1.5 mils (0.001-0.015 in ches) (25 - 38 mi cron) dry. Ap prox i ma te cov er age is 16.54 m²/L, (178 ft²/L). The coat ing should be ap plied at the mini mum nec es sary to pro vide op ac ity (as this will pre vent de fects com mon to over- spraying).

Storage and Transportation

Tuff- Flex WU when stored in un opened con tain ers, on pal lets in a pro tected area has a shelf- life of 12 months. Main tain stock above 10° C (50° F) and less than 29° C (85° F).

TECHNICAL DATA

Non- Yellowing (ASTM D822)	Pass, con tains ali phatic urethane
Non- Flammability (Tag closed cup, ASTM D56)	Pass (> 95.5 °C)
Gloss (60° , 85° , ASTM D523)	1,3 Re spec tively Maxi mum
Cross- Linking	Inter nally Cross- linked
Sin gle Pack age Sta bil ity	Yes
Sol ids Con tent (1 hr @ 105° C, cir cu la tion oven	35%
Spe cific Grav ity (ASTM D1475)	1.02 g/cm ³

FEATURES

- Ex cel lent ad he sion to plas ti cized sur faces
- Can be used on all flexi ble fab rics (can vas, vi nyl, bu tyl rubber)
- Can be used over metal, wood, plas tic, con crete and ma sonry sur faces
- Spray able or brush able for mu la tion
- Meets D-80-001-149/SF-001, Can a dian Mili tary Speci fi ca tion
- Meets MIL- C- 53072B (ME), United States Mili tary Spec i fi ca tion
- Highly flexi ble at low tem pera tures
- Non - tacky at ele vated tem pera tures
- Matt Fin ish, , 1 unit @ 85° ge om e try
- Ex cel lent Weather ability and Cle an ability
- Field or plant ap plied

PRODUCT DESCRIPTION

Basic Use

Tuff- Flex WU (Wa ter borne Urethane) is a pro tec tive, chemi cal re sis tant, cam ou flage coat ing for vir tu ally any sur faces found in mili tary ap pli ca tions. It is used to cam ou flage, pro tect, wa ter- proof flexi ble fab rics, can vases, metal wood and plas tic sur faces. It can be ap plied to con crete and ma sonry sur faces.

Composition and Materials

Tuff- Flex WU coat ing is an ali phatic urethane based, one com po nent, wa ter borne ma te rial con tain ing weather re sis tant in or ganic pig ments. The car rier is pre do mi nately wa ter with a mini mal co- sol vent con tent. It can be spray or brush ap plied to fab ric and air dries to a wa ter and chemi cally re sis tant fin ish of low gloss. Due pri mar ily to the urethane back bone, this coat ing has su pe rior ad he sion to fab rics in clud ing those con tain ing mi grating plas ticizers (vinyls). Fin ishes show high flexi bil ity at low tem pera ture and re sist soft en ing or tacki ness at higher tem pera tures.

Limitations

Do not ap ply when rain freez ing is im mi nent and pro tect from freez ing dur ing the ap pli ca tion. It must not freeze dur ing trans

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00910 Extender Camouflage Paint
00911 Chemical Resistant Coating

Block Resistance (Federal Test Method 5872)	Pass, No Blocking
Coating Adhesion (Federal Test Method 5970B)	Pass, 10 lb force per 1 inch width
Cold temperatures resistance (-40° C, ASTM D1055)	Pass, No flaking or cracking
Resistance to accelerated weathering (Federal Test Method 5804)	No cracking, crazing, blooming, chalking, or notable fading
Mildew Resistance (Internal Method)	Pass, Does not support growth
Flame Resistance (CAN/CGSB-4)	Pass, flame 2 sec., after glow none, char length 89 mm max.
Oil Resistance (Internal method)	No seepage
Hydrostatic resistance (Federal Test Method 5516)	No leakage
Heat Sealability (using radio frequency welder)	Can be RF welded
Viscosity (ZAHN #3, Modified ASTM D1200)	14-20 seconds
Camouflage Properties	
Brightness	Meets MIL specification
Chromaticity (ASTM D2244)	Meets MIL specification
Infra-Red Reflectance	Meets MIL specification
Pigments	Free of Pb, Se, Cd, Hg

Surface Preparation

Preferrably fabrics are sprayed spread flat prior to coating. The fabric must be clean and free of contamination. If washed with soap or detergent, prior to spraying surface should be washed free of soap contamination. Films will coalesce and self cross-link as low as 50° F, but the use of heat, particularly infra-red, is useful.

Clean-up

While still wet the coating may be removed from surfaces using soap and water. Once cured it is highly resistant to cleaners.

AVAILABILITY AND COST

Tuff-Flex WU is available world wide. Contact the manufacturer for the name of the nearest Representative/Distributor and current pricing information.

MAINTENANCE

None required

WARRANTY

A limited twelve (12) month Material Replacement Warranty is available. For complete details contact Gemite's Head Office.

TECHNICAL SERVICE

Technical and Specifications assistance is available from Gemite Technical Service at: USA 888-443-6483 or Canada 905-672-2020.

Short Specification

The camouflage, chemical resistant coating will be a water borne, aliphatic urethane *Tuff-Flex WU* manufactured by Gemite Products Inc., [USA 888-443-6483] [Canada 905-672-2020]. It will be applied at a minimum rate of [..... ft²/USG, m²/L] in accordance with the current manufacturer's specifications and application instructions. Contact Gemite Products Inc. for the latest guide specifications and application instructions.