## SikaFlow-648 Part B Formerly MFlow 648 Low Dust PTB



Version 2.0

Revision Date: 11/15/2021

SDS Number: 000000727304

Date of last issue: 01/07/2021 Date of first issue: 05/29/2020

#### **SECTION 1. IDENTIFICATION**

Product name : SikaFlow-648 Part B Formerly MFlow 648 Low Dust PTB

Product code : 00000000050455277

Other means of identification : MFlow 648 Low Dust PTB

Manufacturer or supplier's details

Company name of supplier : Sika MBCC US LLC

Address : 201 POLITO AVE

Lyndhurst NJ 07071

Emergency telephone : ChemTel: +1-813-248-0585

Recommended use of the chemical and restrictions on use

Recommended use : Injection or grouting applications

Restrictions on use : Reserved for industrial and professional use.

## **SECTION 2. HAZARDS IDENTIFICATION**

## GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 3

Acute toxicity (Dermal) : Category 4

Skin corrosion : Category 1B

Serious eye damage : Category 1

Skin sensitization : Category 1

Reproductive toxicity : Category 2

Short-term (acute) aquatic

hazard

Category 1

Long-term (chronic) aquatic

hazard

Category 1

#### **GHS** label elements



## SikaFlow-648 Part B Formerly MFlow 648 Low **Dust PTB**

Version **Revision Date:** SDS Number: Date of last issue: 01/07/2021 000000727304 2.0 11/15/2021 Date of first issue: 05/29/2020

Hazard pictograms











Signal Word Danger

Hazard Statements H331 Toxic if inhaled.

H314 Causes severe skin burns and eye damage.

H302 + H312 Harmful if swallowed or in contact with skin.

H317 May cause an allergic skin reaction.

H361d Suspected of damaging the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statements** 

### Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing mist or vapors.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of

the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

#### Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON

CENTER/ doctor if you feel unwell. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT

induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately

all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON

CENTER/ doctor.

P305 + P351 + P338 + P310 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/ doctor.

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/

attention.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

#### Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

# SikaFlow-648 Part B Formerly MFlow 648 Low Dust PTB



Version Revision Date: SDS Number: Date of last issue: 01/07/2021 2.0 11/15/2021 000000727304 Date of first issue: 05/29/2020

P405 Store locked up.

#### Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.

#### Other hazards

None known.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : amine-containing

#### Components

Chemical name	CAS-No.	Concentration (% w/w)
	68953-36-6	>= 50 - < 70
with tetraethylenepentamine		
2,2'-iminodi(ethylamine)	111-40-0	>= 0 - < 30
N,N'-bis(3-	10563-26-5	>= 0 - < 30
aminopropyl)ethylenediamine		
triethylenetetramine	112-24-3	>= 0 - < 30
2,4,6-	90-72-2	>= 5 - < 10
tris(dimethylaminomethyl)phenol		
3,6,9-triazaundecamethylene-1,11-	112-57-2	>= 0 - < 10
diamine		
N,N-Bis(2-	4097-89-6	>= 0 - < 10
aminoethyl)ethylenediamine		
bis[(dimethylamino)methyl]phenol	71074-89-0	>= 1 - < 5
Salicylic acid	69-72-7	>= 0 - < 5
N-(2-aminoethyl)-1,3-propanediamine	13531-52-7	>= 0 - <= 5
Fatty acids, C18-unsatd., trimers,	147900-93-4	>= 0.1 - < 1
compds. with oleylamine		

Actual concentration is withheld as a trade secret

## **SECTION 4. FIRST AID MEASURES**

General advice : First aid personnel should pay attention to their own safety.

Immediately remove contaminated clothing.

If inhaled : If difficulties occur after vapour/aerosol has been inhaled,

remove to fresh air and seek medical attention.

In case of skin contact : After contact with skin, wash immediately with plenty of water

and soap.

Under no circumstances should organic solvent be used.

If irritation develops, seek medical attention.

In case of eye contact : Remove contact lenses, if present.

Wash affected eyes for at least 15 minutes under running





Version Revision Date: SDS Number: Date of last issue: 01/07/2021 2.0 11/15/2021 000000727304 Date of first issue: 05/29/2020

water with eyelids held open, consult an eye specialist.

If swallowed : Immediately rinse mouth and then drink 200-300 ml of water,

seek medical attention. Do NOT induce vomiting.

Most important symptoms and effects, both acute and

delayed

Toxic if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Harmful if swallowed or in contact with skin. Suspected of damaging the unborn child.

Notes to physician : Treat symptomatically.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Foam

Water spray Dry powder

Carbon dioxide (CO2)

Unsuitable extinguishing

media

water jet

Specific hazards during fire

fighting

See SDS section 10 - Stability and reactivity.

Hazardous combustion prod: :

ucts

harmful vapours nitrogen oxides fumes/smoke carbon black carbon oxides

Further information : The degree of risk is governed by the burning substance and

the fire conditions.

If exposed to fire, keep containers cool by spraying with water. Collect contaminated extinguishing water separately, do not

allow to reach sewage or effluent systems.

Contaminated extinguishing water must be disposed of in

accordance with official regulations.

Special protective equipment :

for fire-fighters

Wear a self-contained breathing apparatus.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protec- :

tive equipment and emer-

gency procedures

Do not breathe vapour/aerosol/spray mists.

Wear eye/face protection.

If exposed to high vapour concentration, leave area immedi-

ately.

Use personal protective clothing.

Handle in accordance with good building materials hygiene



## SikaFlow-648 Part B Formerly MFlow 648 Low **Dust PTB**

Version Revision Date: SDS Number: Date of last issue: 01/07/2021 2.0 11/15/2021 000000727304 Date of first issue: 05/29/2020

and safety practice.

Environmental precautions Contain contaminated water/firefighting water.

Do not discharge into drains/surface waters/groundwater.

Methods and materials for

Soak up with inert absorbent material (e.g. sand, silica gel, containment and cleaning up acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

**SECTION 7. HANDLING AND STORAGE** 

Advice on protection against :

fire and explosion

Normal measures for preventive fire protection.

Avoid aerosol formation. Advice on safe handling

Avoid inhalation of mists/vapours.

Avoid skin contact. Avoid contact with eyes.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage. Observe label precautions.

Electrical installations / working materials must comply with

the technological safety standards.

Further information on stor-

age conditions

Keep only in the original container in a cool, dry, well-

ventilated place away from ignition sources, heat or flame.

Protect from direct sunlight.

Recommended storage tem-

perature

 $> 40 \, ^{\circ}\text{F} / > 4 \, ^{\circ}\text{C}$ 

Further information on stor-

age stability

PROTECT FROM FREEZING DURING THE COLD-SEASON

(BELOW 40°F / 5°C).

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2,2'-iminodi(ethylamine)	111-40-0	TWA value	1 ppm	ACGIHTLV
		REL value	1 ppm 4 mg/m3	NIOSH
		TWA value	1 ppm 4 mg/m3	29 CFR 1910.1000 (Table Z-1-A)
		TWA	1 ppm	ACGIH
		TWA	1 ppm	NIOSH REL

## SikaFlow-648 Part B Formerly MFlow 648 Low Dust PTB



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 01/07/2021

 2.0
 11/15/2021
 000000727304
 Date of first issue: 05/29/2020

			4 mg/m3	
		TWA	1 ppm	OSHA P0
			4 mg/m3	
triethylenetetramine	112-24-3	TWA	1 ppm	US WEEL
3,6,9-triazaundecamethylene-	112-57-2	TWA	5 mg/m3	US WEEL
1,11-diamine				

**Engineering measures** : Ensure adequate ventilation.

Personal protective equipment

Respiratory protection : Wear appropriate certified respirator when exposure limits

may be exceeded.

Use NIOSH approved respiratory protection.

Hand protection

Remarks : Wear chemical resistant protective gloves. Manufacturer's

directions for use should be observed because of great di-

versity of types.

Eye protection : Wear safety glasses with side shields or goggles.

Skin and body protection : Body protection must be chosen depending on activity and

possible exposure, e.g. head protection, apron, protective

boots, chemical-protection suit.

Protective measures : Do not inhale gases/vapours/aerosols.

Avoid contact with the skin, eyes and clothing.

Avoid exposure - obtain special instructions before use. Handle in accordance with good building materials hygiene

and safety practice.

Wearing of closed work clothing is recommended.

Hygiene measures : When using, do not eat, drink or smoke.

Hands and/or face should be washed before breaks and at

the end of the shift.

At the end of the shift the skin should be cleaned and skin-

care agents applied.

Remove contaminated clothing immediately and clean before

re-use or dispose it if necessary.

Gloves must be inspected regularly and prior to each use.

Replace if necessary (e.g. pinhole leaks).

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Color : amber to yellowish

Odor : amine-like



# SikaFlow-648 Part B Formerly MFlow 648 Low Dust PTB

Version Revision Date: SDS Number: Date of last issue: 01/07/2021 2.0 11/15/2021 000000727304 Date of first issue: 05/29/2020

Odor Threshold : not determined

pH : No data available

Melting point : No data available

Boiling point : approx. 401 °F / 205 °C

Decomposition: Cannot be distilled without decomposition at

normal pressure.

Method: Standard Test Method for Distillation of Petroleum

Products at Atmospheric Pressure

Flash point : approx. 325 °F / 163 °C

Method: Calculation method

Evaporation rate : No data available

Flammability (liquids) : The product is not flammable.

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapor pressure : No data available

Relative vapor density : No data available

Relative density : No data available

Density : approx. 0.96 g/cm3 (68 °F / 20 °C)

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

not applicable for mixtures

Autoignition temperature : not determined

Decomposition temperature : No decomposition if stored and handled as pre-

scribed/indicated.

Viscosity

Viscosity, dynamic : approx. 70 mPa.s (68 °F / 20 °C)

Method: Viscosity of Liquids

Viscosity, kinematic : No data available





Version Revision Date: SDS Number: Date of last issue: 01/07/2021 2.0 11/15/2021 000000727304 Date of first issue: 05/29/2020

Explosive properties : Not explosive

Oxidizing properties : Not an oxidizer.

Sublimation point : No data available

Molecular weight : No data available

**SECTION 10. STABILITY AND REACTIVITY** 

Reactivity : No hazardous reactions if stored and handled as pre-

scribed/indicated.

Chemical stability : The product is stable if stored and handled as pre-

scribed/indicated.

Possibility of hazardous reac-

tions

The product is stable if stored and handled as pre-

scribed/indicated.

Conditions to avoid : See SDS section 7 - Handling and storage.

Incompatible materials : Strong acids

Strong bases

Strong oxidizing agents Strong reducing agents

Hazardous decomposition

products

No hazardous decomposition products if stored and handled

as prescribed/indicated.

### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### **Acute toxicity**

Harmful if swallowed or in contact with skin.

Toxic if inhaled.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: 1,258 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 5.02 mg/l

Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: 1,353 mg/kg

Method: Calculation method

Skin corrosion/irritation

Causes severe burns.



## SikaFlow-648 Part B Formerly MFlow 648 Low Dust PTB

Version Revision Date: SDS Number: Date of last issue: 01/07/2021 2.0 11/15/2021 000000727304 Date of first issue: 05/29/2020

## Serious eye damage/eye irritation

Causes serious eye damage.

#### Respiratory or skin sensitization

### Skin sensitization

May cause an allergic skin reaction.

#### Respiratory sensitization

Not classified based on available information.

## Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

## Reproductive toxicity

Suspected of damaging the unborn child.

## STOT-single exposure

Not classified based on available information.

### STOT-repeated exposure

Not classified based on available information.

## **Aspiration toxicity**

Not classified based on available information.

#### **Further information**

#### **Product:**

Remarks : The product has not been tested. The statements on toxicolo-

gy have been derived from the properties of the individual

components.

## **SECTION 12. ECOLOGICAL INFORMATION**

## **Ecotoxicity**

## Product:

## **Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

### **Components:**

#### Fatty acids, tall-oil, reaction products with tetraethylenepentamine:

M-Factor (Acute aquatic tox- : 10

icity)

M-Factor (Chronic aquatic : 1



## SikaFlow-648 Part B Formerly MFlow 648 Low Dust PTB

Version Revision Date: SDS Number: Date of last issue: 01/07/2021 2.0 11/15/2021 000000727304 Date of first issue: 05/29/2020

toxicity)

Persistence and degradability

No data available

**Bioaccumulative potential** 

No data available

Mobility in soil

No data available

Other adverse effects

**Product:** 

Additional ecological infor-

mation

Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Dispose of in accordance with national, state and local regula-

tions.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Do not discharge into drains/surface waters/groundwater.

Contaminated packaging : Contaminated packaging should be emptied as far as possible

and disposed of in the same manner as the sub-

stance/product.

## **SECTION 14. TRANSPORT INFORMATION**

#### International Regulations

**UNRTDG** 

UN number : UN 2735

Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S.

(FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH TETRAETHYLENEPENTAMINE, DIETHYLENETRIAMINE)

Class : 8
Packing group : II
Labels : 8

**IATA-DGR** 

UN/ID No. : UN 2735

Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S.

(FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH TETRAETHYLENEPENTAMINE, DIETHYLENETRIAMINE)

Class : 8 Packing group : II



## SikaFlow-648 Part B Formerly MFlow 648 Low Dust PTB

Version Revision Date: SDS Number: Date of last issue: 01/07/2021 2.0 11/15/2021 000000727304 Date of first issue: 05/29/2020

Labels : Corrosive Packing instruction (cargo : 855

aircraft)

Packing instruction (passen: 851

ger aircraft)

**IMDG-Code** 

UN number : UN 2735

Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S.

(FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH

TETRAETHYLENEPENTAMINE, DIETHYLENETRIAMINE) 8

Class : 8
Packing group : II
Labels : 8
EmS Code : F-A, S-B
Marine pollutant : yes

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

Not applicable for product as supplied.

#### **Domestic regulation**

**49 CFR** 

UN/ID/NA number : UN 2735

Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S.

(FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH TETRAETHYLENEPENTAMINE, DIETHYLENETRIAMINE)

Class : 8

Packing group : II

Labels : CORROSIVE

ERG Code : 153 Marine pollutant : yes

## Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **SECTION 15. REGULATORY INFORMATION**

#### **US State Regulations**

## Pennsylvania Right To Know

2,2'-iminodi(ethylamine) 111-40-0 triethylenetetramine 112-24-3 3,6,9-triazaundecamethylene-1,11-diamine 112-57-2

## **New Jersey Right To Know**

2,2'-iminodi(ethylamine) 111-40-0 triethylenetetramine 112-24-3 3,6,9-triazaundecamethylene-1,11-diamine 112-57-2

#### The ingredients of this product are reported in the following inventories:

## SikaFlow-648 Part B Formerly MFlow 648 Low **Dust PTB**



Version **Revision Date:** SDS Number: Date of last issue: 01/07/2021 000000727304 2.0 11/15/2021 Date of first issue: 05/29/2020

**DSL** All components of this product are on the Canadian DSL

**TSCA** All chemical substances in this product are either listed as

active on the TSCA Inventory or are in compliance with a

TSCA Inventory exemption.

#### **SECTION 16. OTHER INFORMATION**

#### **Further information**

#### NFPA 704:

## Flammability Health Instability 3 0

Special hazard

#### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

#### Full text of other abbreviations

29 CFR 1910.1000 (Table Z- : OSHA - Table Z-1-A (29 CFR 1910.1000)

1-A)

**ACGIH** USA. ACGIH Threshold Limit Values (TLV)

**ACGIHTLV** American Conference of Governmental Industrial Hygienists -

threshold limit values (US)

NIOSH Pocket Guide to Chemical Hazards (US) NIOSH NIOSH REL USA. NIOSH Recommended Exposure Limits

OSHA P0 USA. OSHA - TABLE Z-1 Limits for Air Contaminants -

1910.1000

**US WEEL** USA. Workplace Environmental Exposure Levels (WEEL)

29 CFR 1910.1000 (Table Z-

1-A) / TWA value

Time Weighted Average (TWA):

8-hour, time-weighted average ACGIH / TWA ACGIHTLV / TWA value Time Weighted Average (TWA): Recommended exposure limit (REL): NIOSH / REL value

NIOSH REL / TWA Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

OSHA P0 / TWA 8-hour time weighted average

US WEEL / TWA 8-hr TWA



## SikaFlow-648 Part B Formerly MFlow 648 Low Dust PTB

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 01/07/2021

 2.0
 11/15/2021
 000000727304
 Date of first issue: 05/29/2020

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule: ENCS - Existing and New Chemical Substances (Japan): ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 11/15/2021

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.

US / EN