MICRO • CHEM

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/05/2015 Reviewed on 02/05/2015

1 Identification of the substance/mixture and of the company

· **Product identifier**

· **Trade name: MCC Primer 80/20**

· **Product number:** P021020
· **Application of the substance / the mixture** Layer to promote adhesion

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
MicroChem Corp.
200 Flanders Road
Westborough, MA 01581 USA

· **Information department:**
Product Safety
Email: productsafety@microchem.com
· **Emergency telephone number:**
MicroChem Corp : 617-965-5511
Chemtrec USA Emergency : 800-424-9300
Chemtrec International Emergency : 703-527-3887

2 Hazard(s) identification

· **Classification of the substance or mixture**

GHS02 Flame

Flam. Liq. 2	H225	Highly flammable liquid and vapor.

GHS06 Skull and crossbones

Acute Tox. 3	H311	Toxic in contact with skin.

GHS08 Health hazard

STOT SE 2	H371-H335-H336	May cause damage to the central nervous system. May cause respiratory irritation. May cause drowsiness or dizziness.

GHS05 Corrosion

Skin Corr. 1B	H314	Causes severe skin burns and eye damage.
Eye Dam. 1	H318	Causes serious eye damage.

GHS07

Acute Tox. 4	H302	Harmful if swallowed.
Acute Tox. 4	H332	Harmful if inhaled.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

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· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS02 GHS05 GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
1,1,1,3,3,3-hexamethyldisilazane
· **Hazard statements**

H225	Highly flammable liquid and vapor.
H302+H332	Harmful if swallowed or if inhaled.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H371-H335-H336	May cause damage to the central nervous system. May cause respiratory irritation. May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P233	Keep container tightly closed.
P273	Avoid release to the environment.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P361	Remove/Take off immediately all contaminated clothing.
P309+P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P370+P378	In case of fire: Use for extinction: Alcohol resistant foam.
P370+P378	In case of fire: Use for extinction: Fire-extinguishing powder.
P370+P378	In case of fire: Use for extinction: Carbon dioxide.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 3
Fire = 3
Reactivity = 1

· **HMIS-ratings (scale 0 - 4)**

Health = 3
Fire = 3
Reactivity = 1

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· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

108-65-6	1-Methoxy-2-propanol acetate Flam. Liq. 3, H226	75-100%
999-97-3	1,1,1,3,3,3-hexamethyldisilazane Flam. Liq. 2, H225; Acute Tox. 3, H311; Acute Tox. 3, H331; Skin Corr. 1B, H314; Acute Tox. 4, H302; Eye Irrit. 2A, H319; STOT SE 3, H335	5-25%

· **Additional Components:**

70657-70-4	2-Methoxy-1-propyl acetate Flam. Liq. 3, H226; Repr. 1B, H360; STOT SE 3, H335	<0.5%

4 First-aid measures

· **Description of first aid measures**
· **General information:** Immediately remove any clothing soiled by the product.
· **After inhalation:**
Supply fresh air.
Seek immediate medical advice.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
Seek immediate medical advice.
· **After eye contact:**
Rinse opened eye for several minutes under running water.
Seek immediate medical advice.
· **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
Fire-extinguishing powder
Alcohol resistant foam
Carbon dioxide
· **For safety reasons unsuitable extinguishing agents:**
Water with full jet
Water

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· **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
Containers may explode due to pressure increase when container is exposed to extreme heat. Vapors may travel a considerable distance to a source of ignition and flash back along vapor trail.
· **Advice for firefighters**
· **Protective equipment:** Wear SCBA.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources
· **Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
· **Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Clean the affected area carefully; suitable cleaners are:
Warm water and cleansing agent
Dispose contaminated material as waste according to Section 13.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaust at the workplace.
Prevent formation of aerosols.
Keep receptacles tightly sealed.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Use explosion-proof apparatus / fittings and spark-proof tools.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and containers:** Store in a cool location.
· **Information about storage in one common storage facility:**
Do not store together with oxidizing and acidic materials.
· **Further information about storage conditions:**
Keep container tightly sealed.
Keep container well-sealed in cool, dry location.
Protect from humidity and water.
Store under inert gas.
· **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
108-65-6 1-Methoxy-2-propanol acetate	
WEEL	50 ppm

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from food and beverages.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not inhale gases / fumes / aerosols.
· **Respiratory equipment:**
In case of low exposure, use cartridge respirator. In case of intensive or longer exposure, use SCBA.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
· **Material of gloves** Butyl rubber, BR
· **Penetration time of glove material** Contact glove manufacture for break-through time.
· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	Clear
· **Odor:**	Ammonia-like
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	126 °C (259 °F)
· **Flash point:**	6 °C (43 °F)

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· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	315 °C (599 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	0.8 Vol %
Upper:	16.3 Vol %
· **Vapor pressure at 20 °C (68 °F):**	12 hPa (9 mm Hg)
· **Density at 20 °C (68 °F):**	0.92824 g/cm³ (7.746 lbs/gal)
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with Water:**	Water miscible No
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	80.0 %
VOC content:	80.0 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **Chemical stability** Stable under normal use conditions
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
· **Possibility of hazardous reactions**
Exothermic reaction with acids.
Reacts with strong oxidizing agents.
Ammonia is formed upon contact with humid air.
· **Conditions to avoid**
Humid air
Water
· **Incompatible materials:**
Strong Oxidizing Agents, Strong Bases, Strong Acids, Amines
Water
· **Hazardous decomposition products:**
Hazardous decomposition products formed under fire conditions - Carbon oxides, nitrogen oxides, silicon oxides

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11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
999-97-3 1,1,1,3,3,3-hexamethyldisilazane		
Oral	LD50	850 mg/kg (Rat)
Dermal	LD50	1350 mg/kg (Rat)
		549.5 mg/kg (rabbit)
Inhalative	LC50/4 h	10 mg/l (Rat)
108-65-6 1-Methoxy-2-propanol acetate		
Oral	LD50	8532 mg/kg (Rat)
Dermal	LD50	>5000 mg/kg (Rat)
Inhalative	LC50/6 h	4345 ppm (Rat)

· **Primary irritant effect:**
· **on the skin:** Strong caustic effect on skin and mucous membranes.
· **on the eye:** Strong irritant with the danger of severe eye injury.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Corrosive
Toxic
Harmful
Danger through skin absorption.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
None of the ingredients are listed.

· **NTP (National Toxicology Program)**
None of the ingredients are listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**	
999-97-3 1,1,1,3,3,3-hexamethyldisilazane	
EC50/48 h	80 mg/l (daphnia magna)
EC50/72 h	19 mg/l (Desmodesmus subscipatus (green algae))
	50 mg/l (scenedesmus subspicatus) (OECD 201)
LC50/96 h	88 mg/l (zebra fish)
108-65-6 1-Methoxy-2-propanol acetate	
ErC50 96 hour	>1000 mg/l (Pseudokirchneriella subcapitata (algea))
LC50	408-500 mg/l (daphnia magna)
	100-180 mg/l (rainbow trout (Oncorhynchus mykiss))

· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.

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· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of as regular garbage/trash. Do not allow product to reach sewage system.
Disposal must be made in accordance with Federal, State, and Local regulations.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made in accordance with Federal, State, and Local regulations.

14 Transport information

· **UN-Number**	
· **DOT, ADR, IMDG, IATA**	UN2924
· **UN proper shipping name**	
· **DOT, ADR**	Flammable liquids, corrosive, n.o.s. (1,1,1,3,3,3-hexamethyldisilazane, 1-Methoxy-2-propanol acetate)
· **IMDG, IATA**	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (1,1,1,3,3,3-hexamethyldisilazane, 1-Methoxy-2-propanol acetate)
· **Transport hazard class(es)**	
· **DOT**	
· **Class**	3 Flammable liquids.
· **Label**	3
· **ADR, IMDG, IATA**	
· **Class**	3 Flammable liquids
· **Label**	3
· **Packing group**	
· **DOT, ADR, IMDG, IATA**	II

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· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Warning: Flammable liquids
· **Danger code (Kemler):**	33
· **EMS Number:**	F-E,S-C
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	UN2924, Flammable liquids, corrosive, n.o.s. (1,1,1,3,3,3-hexamethyldisilazane, 1-Methoxy-2-propanol acetate), 3, II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 355 (extremely hazardous substances):**
None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**
All ingredients are listed or comply with TSCA regulations.

· **Proposition 65**

· **Chemicals known to cause cancer:**
None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients are listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients are listed.

· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients are listed.

· **New Jersey State Right To Know List**
999-97-3 | 1,1,1,3,3,3-hexamethyldisilazane

· **Pennsylvania Hazardous Substances List**
999-97-3 | 1,1,1,3,3,3-hexamethyldisilazane

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· **California SCAQMD Rule 443.1 VOC's:** 960 g/l; vapor pressure 3.8 mm Hg @ 25C
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS02 GHS05 GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
1,1,1,3,3,3-hexamethyldisilazane
· **Hazard statements**

H225	Highly flammable liquid and vapor.
H302+H332	Harmful if swallowed or if inhaled.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H371-H335-H336	May cause damage to the central nervous system. May cause respiratory irritation. May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P233	Keep container tightly closed.
P273	Avoid release to the environment.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P361	Remove/Take off immediately all contaminated clothing.
P309+P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P370+P378	In case of fire: Use for extinction: Alcohol resistant foam.
P370+P378	In case of fire: Use for extinction: Fire-extinguishing powder.
P370+P378	In case of fire: Use for extinction: Carbon dioxide.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Product safety department
· **Contact:** Mr. Cole

· **Revision History:**
The business address of the manufacturer in Section 1 was updated. The hazard classification and precautionary statements for the mixture in Section 2 were revised. The toxicology data in Sections 11 and 12 were revised.
· **Date of preparation / last revision** 02/05/2015 / -

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· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent