

Safety Data Sheet

October 24, 2017

1. IDENTIFICATION

Product Identifier

Product Name FORMULA ONE PART A

Other means of identification

UN/ID No UN3266

Recommended use of the chemical and restrictions on use

Recommended Use Concentrated industrial cleaning solution. For professional use only.

Details of the supplier of the safety data sheet

Supplier Address

North Woods 4415 S Taylor Drive Sheboygan, WI, 53081 www.northwoodstm.com

Emergency Telephone Number

Company Phone Number Phone: 800-242-7694

Emergency Telephone (24 hr) INFOTRAC 1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear liquid Physical State Liquid Odor Bland

Classification

| Acute toxicity - Oral | Category 4 |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation | Category 1 Sub-category B |
| Serious eye damage/eye irritation | Category 1 |

Signal Word Danger

Hazard Statements

Harmful if swallowed Causes severe skin burns and eye damage



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

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

Precautionary Statements - Response

Immediately call a poison center or doctor/physician

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: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Do not induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No | Weight-% |
|----------------------------|-----------|----------|
| Potassium hydroxide | 1310-58-3 | 30-40 |
| D-Sodium Silicate Solution | 1344-09-8 | 5-10 |
| Triethanolamine | 102-71-6 | 1-5 |
| EDTA | 60-00-4 | <1 |

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact 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.

Skin Contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. Wash contaminated clothing before reuse.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a poison center or doctor/physician.

Ingestion IF SWALLOWED: call a poison control center or physician immediately. Rinse mouth. Do

not induce vomiting.

Most important symptoms and effects

Symptoms Causes severe skin burns and eye damage. Harmful if swallowed.

Indication of any immediate medical attention and special treatment needed

Notes to Physician 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 Not determined.

Specific Hazards Arising from the Chemical

Material is corrosive.

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 PrecautionsUse personal protective equipment as required.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See

Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

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

Methods for Clean-Up Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal

protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked

up. Keep out of the reach of children.

Incompatible Materials Acids. Oxidizing agents. Bleach. Do not mix with other chemicals or cleaners.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------------------------|------------------------------|--|------------------------------|
| Potassium hydroxide 1310-58-3 | Ceiling: 2 mg/m ³ | (vacated) Ceiling: 2 mg/m ³ | Ceiling: 2 mg/m ³ |
| Triethanolamine 102-71-6 | TWA: 5 mg/m ³ | - | - |

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Eyewash

stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear approved safety goggles where a splash hazard exists.

Skin and Body Protection Wear suitable protective clothing.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash face, hands

and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid

AppearanceClear liquidOdorBland

Color Colorless Odor Threshold Not determined

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 13.8 (concentrate)Melting Point/Freezing Point Not determined

Boiling Point/Boiling Range100 °C / 212 °FIBPFlash PointNone to boilingTag Closed Cup

Evaporation Rate Equal to water
Flammability (Solid, Gas) Liquid-not applicable
Upper Flammability Limits Not determined
Vapor Pressure Not determined
Vapor Density Not determined

Specific Gravity 1.43

Water Solubility Soluble in water Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Water thin (<5 cps) **Explosive Properties** Not determined **Oxidizing Properties** Not determined

VOC Content (%) 4%

Density 11.90 lb/gal

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Acids. Oxidizing agents. Bleach. Do not mix with other chemicals or cleaners.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns.

Inhalation Avoid breathing vapors or mists.

Ingestion Harmful if swallowed.

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|----------------------|--|-----------------|
| Water 7732-18-5 | > 90 mL/kg (Rat) | - | - |
| Potassium hydroxide 1310-58-3 | = 214 mg/kg (Rat) | - | - |
| D-Sodium Silicate Solution 1344-09-8 | = 1153 mg/kg (Rat) | > 4640 mg/kg (Rabbit) | - |
| Triethanolamine 102-71-6 | = 4190 mg/kg (Rat) | > 2000 mg/kg (Rabbit)> 16 mL/kg (Rat) | - |
| EDTA 60-00-4 | = 1700 mg/kg (Rat) | - | - |

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

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

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested. Group 3 IARC components are "not classifiable as human carcinogens".

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|-----------------|-------|---------|-----|------|
| Triethanolamine | | Group 3 | | |
| 102-71-6 | | | | |

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|----------------------------|----------------------------|------------------------------|----------------------------|--------------------------|
| Potassium hydroxide | | 80: 96 h Gambusia affinis | | |
| 1310-58-3 | | mg/L LC50 static | | |
| D-Sodium Silicate Solution | | 301 - 478: 96 h Lepomis | | 216: 96 h Daphnia magna |
| 1344-09-8 | | macrochirus mg/L LC50 | | mg/L EC50 |
| | | 3185: 96 h Brachydanio rerio | | |
| | | mg/L LC50 semi-static | | |
| Triethanolamine | 216: 72 h Desmodesmus | 10600 - 13000: 96 h | | 1386: 24 h Daphnia magna |
| 102-71-6 | subspicatus mg/L EC50 169: | Pimephales promelas mg/L | | mg/L EC50 |
| | 96 h Desmodesmus | LC50 flow-through 1000: 96 | | _ |
| | subspicatus mg/L EC50 | h Pimephales promelas mg/L | | |
| | | LC50 static 450 - 1000: 96 h | | |
| | | Lepomis macrochirus mg/L | | |
| | | LC50 static | | |
| EDTA | 1.01: 72 h Desmodesmus | 34 - 62: 96 h Lepomis | | 113: 48 h Daphnia magna |
| 60-00-4 | subspicatus mg/L EC50 | macrochirus mg/L LC50 | | mg/L EC50 Static |
| | | static 44.2 - 76.5: 96 h | | |
| | | Pimephales promelas mg/L | | |
| | | LC50 static | | |

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

| Chemical Name | Partition Coefficient |
|----------------------------------|-----------------------|
| Potassium hydroxide 1310-58-3 | 0.83 |
| Triethanolamine 102-71-6 | -2.53 |

Other Adverse Effects

Not determined

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 Disposal should be in accordance with applicable regional, national and local laws and

regulations.

California Hazardous Waste Status

| Chemical Name | California Hazardous Waste Status |
|---------------------|-----------------------------------|
| Potassium hydroxide | Toxic |
| 1310-58-3 | Corrosive |

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT

UN/ID No UN3266

Proper Shipping Name Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)

Hazard Class 8
Packing Group | |

IATA

UN/ID No UN3266

Proper Shipping Name Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)

Hazard Class 8
Packing Group | |

IMDG

UN/ID No UN3266

Proper Shipping Name Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)

Hazard Class 8
Packing Group II

15. REGULATORY INFORMATION

International Inventories

Not determined

Legend:

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

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

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

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) |
|---------------------|--------------------------|----------------|--------------------------|
| Potassium hydroxide | 1000 lb | | RQ 1000 lb final RQ |
| 1310-58-3 | | | RQ 454 kg final RQ |
| EDTA | 5000 lb | | RQ 5000 lb final RQ |
| 60-00-4 | | | RQ 2270 kg final RQ |

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

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)

| Component | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|--|--------------------------------|------------------------|---------------------------|-------------------------------|
| Potassium hydroxide 1310-58-3 (30-40) | 1000 lb | | | Х |
| EDTA 60-00-4 (<1) | 5000 lb | | | Х |

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 |
|----------------------------------|------------|---------------|--------------|
| Potassium hydroxide 1310-58-3 | X | X | X |
| Triethanolamine 102-71-6 | Х | X | X |
| EDTA 60-00-4 | Х | X | Х |

16. OTHER INFORMATION

| <u>NFPA</u> | Health Hazards | Flammability | Instability | Special Hazards |
|-------------|----------------|--------------|------------------|---------------------|
| | 3 | 0 | 0 | Cor |
| <u>HMIS</u> | Health Hazards | Flammability | Physical Hazards | Personal Protection |
| | 3 | 0 | 0 | Χ |

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