SAFETY DATA SHEET

Issuing Date 01-Mar-2016

Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

| | 2. HAZARDS IDENTIFICATION |
|--|--|
| Company Phone Number | 1-888-708-1929 |
| | 1-800-535-5053 (NORTH AMERICA) |
| | INFOTRAC: 1-352-323-3500 (INTERNATIONAL) |
| Emergency telephone number | |
| Wallingford, CT 06492 | |
| 21 Marshall Street | |
| Multi-Steam | |
| Distributor | |
| Details of the supplier of the safety of | data sheet |
| Recommended use | Industrial Degreaser |
| Recommended use of the chemical | |
| | |
| Document | 63256CG1-4 |
| UN/ID No | UN3266 |
| Product Code | 63256 |
| Other means of identification | |
| | |
| Product name | Multi-Steam Turbo Juice Fire |
| Product identifier | |

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Skin corrosion/irritation | Category 1 Sub-category A |
|-----------------------------------|---------------------------|
| Serious eye damage/eye irritation | Category 1 |

Label elements

| ncy Overview |
|--------------------------------|
| |
| |
| |
| |
| state Liquid Odor Glycol ether |
| cal |

- Do not breathe dust/lume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- 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
- 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
- IF SWALLOWED: 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

Hazards not otherwise classified (HNOC)

Other information

• May be harmful if swallowed

Harmful to aquatic life with long lasting effects

Unknown Acute Toxicity 9.612% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

| Chemical Name | CAS-No | Weight-% | Trade Secret |
|------------------|-----------|-----------|--------------|
| 2-Butoxyethanol | 111-76-2 | 12% - 18% | * |
| Sodium hydroxide | 1310-73-2 | 3% - 7% | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

| General advice | Show this safety data sheet to the doctor in attendance. | |
|--|---|--|
| Eye contact | Immediately flush eyes with large amounts of water for 15 minutes or until irritation subsides. Call for prompt medical attention. | |
| Skin contact | Remove contaminated clothing (including shoes) and wash before reuse. Flush with large amounts of water. Use soap if available. Seek medical attention. | |
| Inhalation | Move to fresh air in case of accidental inhalation of vapors. If victim has stopped breathing, give artificial respiration. Call for prompt medical attention. | |
| Ingestion | Do not induce vomiting unless directed by a physician. If conscious and alert, give two glasses of water.Seek medical attention immediately. | |
| Protection of First-aiders | Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. | |
| Most important symptoms/effects, acute and delayed | | |

| Main Symptoms | The most important known symptoms and effects are described in the labelling in section 2 and/or in section 11. | | | |
|--|---|--|--|--|
| Indication of immediate medical attention and special treatment needed, if necessary | | | | |
| Notes to physician | Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage. | | | |
| | 5. FIRE-FIGHTING MEASURES | | | |
| Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. | | | | |
| Unsuitable Extinguishing Media | This product contains alcohols which will reduce the effectiveness of normal foam. Use alcohol-resistant foam instead. | | | |
| Specific hazards arising from the cl Corrosive or strongly alkaline liquid. C | hemical oncentrate product solution in contact with aluminum releases hydrogen gas. | | | |
| Hazardous Combustion Products | Ammonia. Carbon monoxide. Nitrogen oxides (NOx). | | | |
| <u>Explosion Data</u> Sensitivity to Mechanical Impac Sensitivity to Static Discharge | t None. None. | | | |
| Protective Equipment and Precaution As in any fire, wear self-contained breat protective gear. | 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 | | | | |
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| | uipment and emergency procedures Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure | | | |
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Conditions for safe storage, including any incompatibilities

| Technical measures/Storage conditions | Keep container in cool well-ventilated area. Keep container tightly closed. Store away from incompatible materials. Keep out of the reach of children. |
|---------------------------------------|--|
| Incompatible products | Strong oxidizing agents, acids, aluminum and other soft metals. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Exposure Guidelines | Review Section 3 & 4 for Exposure Guidelines. | | |
|-----------------------------|---|---|------------------------------|
| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
| 2-Butoxyethanol 111-76-2 | TWA: 20 ppm | TWA: 50 ppm TWA: 240 mg/m ³ | IDLH: 700 ppm TWA: 5 ppm |
| - | | S* | TWA: 24 mg/m ³ |
| Sodium hydroxide | - | TWA: 2 mg/m ³ | IDLH: 10 mg/m ³ |
| 1310-73-2 | | | Ceiling: 2 mg/m ³ |

NIOSH IDLH: Immediately Dangerous to Life or Health

Appropriate engineering controls

| Engineering Measures | Ensure that eyewash stations and safety showers or an equivalent method of decontamination are close to the work location. Ensure adequate ventilation, especially in confined areas ch as personal protective equipment |
|--------------------------|---|
| Eye/Face Protection | Splash-proof chemical goggles or face shield. |
| Skin and body protection | Impervious rubber, alkali-proof protective gloves. Impervious rubber boots & apron |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| Hygiene measures | Do not eat, drink or smoke when using this product. Practice good personal hygiene. Wash after handling. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

| Physical state Appearance Color | Liquid Transparent Purple | Odor Odor Threshold | Glycol ether No information available |
|---------------------------------------|---------------------------------|------------------------|--|
| Property | Values | Remarks • Methods | |
| рН | 13.9 | ± 0.5 | |
| Melting/freezing point | NA | | |
| Boiling point/boiling range | > 100 °C / 212 °F | Estimated | |
| Flash Point | > 93 °C > 200 °F | TCC | |
| Evaporation rate | <1 | | |
| Flammability (solid, gas) | No information available | | |
| Flammability Limits in Air | | | |
| Upper flammability limit | No information available | | |
| Lower flammability limit | No information available | | |
| Vapor pressure | NA | | |
| Vapor density | NIF | | |
| Specific Gravity | 1.054 ± 0.005 | | |
| Water solubility | Completely Soluble | Completely soluble. | |
| | | | |

| Solubility in other solvents Partition coefficient: n-octanol/water Autoignition temperature Decomposition temperature Viscosity, kinematic Viscosity, dynamic Explosive properties Oxidizing Properties | No information available No information available |
|---|--|
| Other information | |
| Softening point | N/A |
| Molecular Weight | N/A |
| VOC Content(%) | < 20% |
| Density VALUE | N/A |
| Bulk Density VALUE | N/A |

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Strong oxidizing agents, acids, aluminum and other soft metals.

Hazardous Decomposition Products

Hydrogen gas in contact with some metals.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| Chamical Name | | Dermel DE0 | LCE0 Inholotion | |
|---------------------|------------------------------|--|-----------------|--|
| Ingestion | Severe irritation of the gas | Severe irritation of the gastrointestinal tract, causing vomiting, nausea and burns. | | |
| Skin contact | Contact causes severe ski | Contact causes severe skin irritation and possible burns. | | |
| Eye contact | Corrosive to the eyes and | Corrosive to the eyes and may cause severe damage including blindness. | | |
| Inhalation | Inhalation may cause seve | Inhalation may cause severe respiratory irritation and pulmonary edema. | | |
| Product Information | Causes severe skin burns | Causes severe skin burns and eye damage | | |

| Chemical Name | Oral LD50 | Dermal LD50 | LC50 Inhalation |
|-------------------------------|-------------------|-----------------------|--------------------|
| 2-Butoxyethanol 111-76-2 | = 470 mg/kg (Rat) | = 99 mg/kg (Rabbit) | = 450 ppm (Rat)4 h |
| Sodium hydroxide 1310-73-2 | 140 mg/kg (Rat) | = 1350 mg/kg (Rabbit) | - |

Information on toxicological effects

Symptoms

No information available.

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

| Sensitization | No information available. |
|-------------------|--|
| Mutagenic effects | No information available. |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Chemical Name | ACGIH | IARC | NTP | OSHA | | |
|----------------------------|------------------------------|--|-----------------------------|------|--|--|
| 2-Butoxyethanol | A3 | Group 3 | - | - | | |
| 111-76-2 | | | | | | |
| ACGIH: (American Cont | ference of Governmental In | dustrial Hygienists) | | | | |
| A3 - Animal Carcinogen | | | | | | |
| | ency for Research on Cance | | | | | |
| Group 3 - Not Classifiable | as to Carcinogenicity in Hun | | | | | |
| Reproductive toxicity | No information | No information available. | | | | |
| STOT - single exposure | No information | No information available. | | | | |
| STOT - repeated exposur | e No information | No information available. | | | | |
| Chronic toxicity | Prolonged or | Prolonged or repeated skin contact may cause dermatitis. | | | | |
| Aspiration hazard | No information | No information available. | | | | |
| Numerical measures of to | oxicity - Product Inform | ation | | | | |
| Unknown Acute Toxicity | 9.612% of the | e mixture consists of ingre | dient(s) of unknown toxicit | y | | |
| The following values are | calculated based on cha | apter 3.1 of the GHS doc | ument . | | | |
| ATEmix (oral) | oral) 2724 mg/kg | | | | | |
| ATEmix (dermal) | 5767 mg/kg | | | | | |
| ATEmix (inhalation-du | 0 0 | | | | | |
| ATEmix (inhalation-va | , 3 | , 0 | | | | |
| | | | | | | |

12. ECOLOGICAL INFORMATION

Ecotoxicity

14.412% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|------------------|----------------------|--------------------------------|---------------------------------|
| 2-Butoxyethanol | - | 1490: 96 h Lepomis macrochirus | 1698 - 1940: 24 h Daphnia magna |
| 111-76-2 | | mg/L LC50 static 2950: 96 h | mg/L EC50 >1000: 48 h Daphnia |
| | | Lepomis macrochirus mg/L LC50 | magna mg/L EC50 |
| Sodium hydroxide | - | 45.4: 96 h Oncorhynchus mykiss | - |
| 1310-73-2 | | mg/L LC50 static | |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | Partition coefficient |
|-----------------|-----------------------|
| 2-Butoxyethanol | 0.81 |
| 111-76-2 | |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

| Waste Disposal Methods | Disposal should be in accordance with applicable regional, national and local laws and |
|------------------------|--|
| | regulations. |

Contaminated packaging Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste Status | |
|------------------|-----------------------------------|--|
| Sodium hydroxide | Toxic Corrosive | |
| 1310-73-2 | | |

14. TRANSPORT INFORMATION

Note

Ltd Qty - Liquids - 38.4 OZ or Less/ Solids 2.2 lbs or less

DOT

UN/ID No

Number

Regulated UN3266 Corrosive Liquid, Basic, Inorganic, n.o.s. (Sodium Hydroxide) Proper shipping name Hazard class 8 **Packing Group** Ш **Emergency Response Guide** 154

15. REGULATORY INFORMATION

| International Inventories | |
|---------------------------|----------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | - |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

TSCA - All components of this product are listed or are exempt or excluded from listing on the 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 Commercial Chemical Substances/EU 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

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name | SARA 313 - Threshold Values % 1.0 | |
|-----------------------------------|--------------------------------------|--|
| 2-Butoxyethanol - 111-76-2 | | |
| SARA 311/312 Hazard Categories | | |
| Acute Health Hazard | Yes | |
| Chronic Health Hazard | no | |
| Fire Hazard | no | |
| Sudden Release of Pressure Hazard | no | |
| Reactive Hazard | Yes | |

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):

| Chemical Name CWA - Report Quantities | ble CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|--|----------------------------|---------------------------|-------------------------------|
|--|----------------------------|---------------------------|-------------------------------|

| Sodium hydroxide 1310-73-2 | 1000 lb | - | - | Х |
|-------------------------------|---------|---|---|---|

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 | Extremely Hazardous Substances RQs | RQ |
|-------------------------------|--------------------------|---------------------------------------|---|
| Sodium hydroxide 1310-73-2 | 1000 lb | - | RQ 1000 lb final RQ RQ 454 kg final RQ |

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product contains substances regulated by state right-to-know regulations.

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|-------------------------------|------------|---------------|--------------|
| 2-Butoxyethanol 111-76-2 | Х | Х | Х |
| Sodium hydroxide 1310-73-2 | Х | X | Х |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

| 16. OTHER INFORMATION | | | | | | | |
|---|------------------|----------------|--------------------|-----------------------------------|--|--|--|
| <u>NFPA</u> | Health Hazards 3 | Flammability 0 | Instability 1 | Physical and chemical hazards COR | | | |
| HMIS | Health hazard 3 | Flammability 0 | Physical Hazards 1 | Personal protection X | | | |
| Prepared By Issuing date Revision Date Revision Note | 01-Mar-2016 | | | | | | |

Disclaimer

The information provided in this Material 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