According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Material Safety Data Sheet

1. MATERIAL AND COMPANY IDENTIFICATION

Material Name : Slick 50 HM Fuel System Cleaner

Uses : Fuel treatment

Manufacturer/Supplier : ITW Global Brands

6925 Portwest Dr., Suite 100 Houston, TX. 77024-8042

USA

MSDS Request : 1-855-888-1988

Emergency Telephone Number

Spill Information : (CHEMTREC) 1-800-424-9300, Local: 1-703-527-3887

Health Information : (RMPDC) 1-877-504-9352

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Identity | CAS No. | Concentration |
|------------------------|-----------|-----------------|
| Kerosine | 8008-20-6 | 30.00 - 60.00 % |
| 1,2,4-trimethylbenzene | 95-63-6 | 1.00 - 5.00 % |

Blend of kerosine and additives.

3. HAZARDS IDENTIFICATION

Emergency Overview Appearance and Odour : Amber. Liquid. Hydrocarbon.

Health Hazards : Harmful: may cause lung damage if swallowed. Vapours may

cause drowsiness and dizziness.

Safety Hazards : Flammable.

Environmental Hazards : Toxic to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

Health Hazards

Inhalation : Vapours may cause drowsiness and dizziness.

Skin Contact: May cause moderate irritation to skin. Repeated exposure may

cause skin dryness or cracking.

Eye Contact : May cause slight irritation to eyes.

Ingestion : Harmful: may cause lung damage if swallowed.

Signs and Symptoms : If material enters lungs, signs and symptoms may include

coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure. Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance.

Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-

Print Date 02/07/2011 MSDS US

MSDS# 10532 Version 1.0 Effective Date 09/23/2008

Material Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Aggravated Medical

headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this

material: Skin. Respiratory system.

Environmental Hazards

Condition

Toxic to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

Additional Information

Under normal conditions of use or in a foreseeable emergency, this product meets the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

4. FIRST AID MEASURES

Inhalation Remove to fresh air. If rapid recovery does not occur, transport

to nearest medical facility for additional treatment.

Skin Contact Remove contaminated clothing. Flush exposed area with water

and follow by washing with soap if available. If persistent

irritation occurs, obtain medical attention.

Eye Contact Flush eye with copious quantities of water. If persistent

irritation occurs, obtain medical attention.

If swallowed, do not induce vomiting: transport to nearest Ingestion

medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever

greater than 101° F (37° C), shortness of breath, chest

congestion or continued coughing or wheezing.

Advice to Physician Treat symptomatically. Potential for chemical pneumonitis.

Consider: gastric lavage with protected airway, administration of activated charcoal. Call a doctor or poison control centre for

guidance.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Flash point 55 °C / 131 °F **Upper / lower** Typical 0.60 - 6 %(V)

Flammability or **Explosion limits**

Auto ignition temperature

: > 200 °C / 392 °F

Specific Hazards Will float and can be reignited on surface water. Hazardous

> combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds.

Suitable Extinguishing

Media

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing

Media

Do not use water in a jet.

Protective Equipment for Proper protective equipment including breathing apparatus

Print Date 02/07/2011 MSDS US

Material Safety Data Sheet

Effective Date 09/23/2008 According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Firefighters must be worn when approaching a fire in a confined space. **Additional Advice** : Keep adjacent containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe all relevant local and international regulations.

Protective measures : Avoid contact with skin and eyes. Shut off leaks, if possible

without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a

safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all

equipment.

Clean Up Methods : Slippery when spilt. Avoid accidents, clean up immediately.

Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

Additional Advice : Local authorities should be advised if significant spillages

cannot be contained.

7. HANDLING AND STORAGE

General Precautions : Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine

appropriate controls for safe handling, storage and disposal of

this material.

Handling : Extinguish any naked flames. Do not smoke. Remove ignition

sources. Avoid sparks. Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. Use only in well-ventilated areas. When handling product in drums, safety footwear should be worn and proper handling equipment

should be used.

Storage : Must be stored in a diked (bunded) well-ventilated area, away

from sunlight, ignition sources and other sources of heat. Use properly labelled and closeable containers. Keep container tightly closed. Storage Temperature: 0 - 50 °C / 32 - 122 °F

Product Transfer : Electrostatic charges may be generated during handling.

Electrostatic discharge may cause fire.

Earth all equipment.

Recommended Materials : For containers or container linings, use mild steel or high

density polyethylene.

Print Date 02/07/2011 MSDS US

Material Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Unsuitable Materials PVC.

Additional Information Polyethylene containers should not be exposed to high

temperatures because of possible risk of distortion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

| Material | Source | Туре | ppm | mg/m3 | Notation |
|-------------|----------|--------------|--------|-----------|-------------------------|
| Kerosine | ACGIH | TWA(Non- | | 200 mg/m3 | as total hydrocarbon |
| | | aerosol.) | | _ | vapor |
| Kerosine | ACGIH | SKIN_DES(N | | | Can be absorbed through |
| | | on-aerosol.) | | | the skin.as total |
| | | | | | hydrocarbon vapor |
| 1,2,4- | ACGIH | TWA | 25 ppm | | |
| trimethylbe | | | | | |
| nzene | | | | | |
| 1,2,4- | OSHA Z1A | TWA | 25 ppm | 125 mg/m3 | |
| trimethylbe | | | | | |
| nzene | | | | | |

Exposure Controls The level of protection and types of controls necessary will vary

depending upon potential exposure conditions. Select controls

based on a risk assessment of local circumstances.

Appropriate measures include: Use sealed systems as far as possible. Adequate explosion-proof ventilation to control

airborne concentrations below the exposure guidelines/limits.

Personal Protective Equipment

Respiratory Protection

Personal protective equipment (PPE) should meet

recommended national standards. Check with PPE suppliers. No respiratory protection is ordinarily required under normal

conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for

combined particulate/organic gases and vapours [boiling point

>65 °C (149 °F)].

Hand Protection Where hand contact with the product may occur the use of

gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity, Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective

4/9 Print Date 02/07/2011 MSDS US

MSDS# 10532 Version 1.0 Effective Date 09/23/2008

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Material Safety Data Sheet

Eye Protection

hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. Wear safety glasses or full face shield if splashes are likely to

occur.

Protective Clothing Skin protection not ordinarily required beyond standard issue

work clothes. It is good practice to wear chemical resistant

aloves.

Monitoring Methods Monitoring of the concentration of substances in the breathing

> zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also

be appropriate.

Environmental Exposure

Controls

Minimise release to the environment. An environmental

assessment must be made to ensure compliance with local

environmental legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Amber. Liquid. Hydrocarbon. Odour pΗ Not applicable.

Initial Boiling Point and : > 150 °C / 302 °F estimated value(s)

Boiling Range

Flash point : 55 °C / 131 °F : Typical 0.60 - 6 %(V)

Upper / lower Flammability

or Explosion limits

 $: > 200 \, ^{\circ}\text{C} / 392 \, ^{\circ}\text{F}$

Auto-ignition temperature : < 300 Pa at 20 °C / 68 °F (estimated value(s)) Vapour pressure

Specific gravity : 0.89 - 0.9 Water solubility : Negligible.

n-octanol/water partition

coefficient (log Pow)

Vapour density (air=1) : > 5 (estimated value(s)) : Data not available Evaporation rate (nBuAc=1)

10. STABILITY AND REACTIVITY

Stability : Stable.

Conditions to Avoid : Avoid heat, sparks, open flames and other ignition sources.

Materials to Avoid Strong oxidising agents.

Hazardous Decomposition

: Hazardous decomposition products are not expected to form **Products** during normal storage.

Hazardous Polymerisation : Data not available

Sensitivity to Mechanical : Data not available

Impact

11. TOXICOLOGICAL INFORMATION

Basis for Assessment : Information given is based on data on the components and the

toxicology of similar products.

Expected to be of low toxicity: LD50 > 5000 mg/kg, Rat **Acute Oral Toxicity**

Print Date 02/07/2011 MSDS US

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Material Safety Data Sheet

Aspiration into the lungs when swallowed or vomited may

cause chemical pneumonitis which can be fatal.

Acute Dermal Toxicity Acute Inhalation Toxicity Expected to be of low toxicity: LD50 > 5000 mg/kg, Rabbit Expected to be of low toxicity: LC50 >20 mg/l / 4 h, Rat High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or

death.

Skin Irritation Moderately irritating to skin (but insufficient to classify).

Repeated exposure may cause skin dryness or cracking.

Eye Irritation

Respiratory Irritation

Expected to be slightly irritating.

Inhalation of vapours or mists may cause irritation.

Sensitisation **Repeated Dose Toxicity**

Not expected to be a skin sensitiser. Not expected to be a hazard.

Mutagenicity

: Not considered a mutagenic hazard.

Carcinogenicity : Not classified as a carcinogen.

| Material | : | Carcinogenicity Classification | |
|----------|---|--|--|
| Kerosine | : | ACGIH Group A3: Confirmed animal carcinogen with unknown | |
| | | relevance to humans. | |
| Kerosine | : | IARC 2A: Probable carcinogen. | |

Reproductive and **Developmental Toxicity** : Not expected to be a hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity : Poorly soluble mixture. Expected to be toxic: LL/EL/IL50 1-10

> mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test

extract).

Mobility Liquid under most environmental conditions. Floats on water.

> Contains volatile components. Partly evaporates from water or soil surfaces, but a significant proportion will remain after one day. If it enters soil, it will adsorb to soil particles and will not be

mobile.

Persistence/degradability Expected to be not readily biodegradable. Major constituents

> are expected to be inherently biodegradable, but the product contains components that may persist in the environment. The volatile components oxidise rapidly by photochemical reactions

in air.

Bioaccumulation Contains components with the potential to bioaccumulate.

Other Adverse Effects Not expected to have ozone depletion potential, photochemical

ozone creation potential or global warming potential.

13. DISPOSAL CONSIDERATIONS

Material Disposal Recover or recycle if possible. It is the responsibility of the

6/9 Print Date 02/07/2011 MSDS US

MSDS# 10532 Version 1.0 Effective Date 09/23/2008

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Material Safety Data Sheet

waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.

Container Disposal : Drain container thoroughly. After draining, vent in a safe place

away from sparks and fire. Do not, puncture, cut, or weld uncleaned drums. Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be

established beforehand.

Local Legislation : Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

14. TRANSPORT INFORMATION

Emergency Response Guide

No .

Additional Information US Department of Transportation Classification (49CFR):

Proper Shipping Name - Consumer Commodity, Class/Division

- ORM-D.

128

IMDG

Identification number UN 1223
Proper shipping name KEROSENE

Class / Division 3
Packing group III
Marine pollutant: No

IATA (Country variations may apply)

Identification number ID 8000

Proper shipping name Consumer Commodity

Class / Division 9

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Federal Regulatory Status

Notification Status

TSCA

DSL

EINECS All components listed or

polymer exempt.
All components listed.
All components listed.

Print Date 02/07/2011 MSDS_US

MSDS# 10532 Version 1.0 Effective Date 09/23/2008 According to OSHA Hazard Communication Standard, 29 CFR

1910.1200

Material Safety Data Sheet

SARA Hazard Categories (311/312)

Immediate (Acute) Health Hazard. Delayed (Chronic) Health Hazard. Fire Hazard.

SARA Toxic Release Inventory (TRI) (313)

1,2,4-trimethylbenzene (95-63-6) 1.65%

State Regulatory Status

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

New Jersey Right-To-Know Chemical List

Kerosine (8008-20-6) Listed.

1,2,4-trimethylbenzene (95-63-6) Listed.

Pennsylvannia Right-To-Know Chemical List

Kerosine (8008-20-6) Listed.

1,2,4-trimethylbenzene (95-63-6) Environmental hazard.

Listed.

16. OTHER INFORMATION

NFPA Rating (Health, Fire, Reactivity)

: 2, 2, 0

MSDS Version Number : 1.0

MSDS Effective Date 09/23/2008

MSDS Revisions A vertical bar (|) in the left margin indicates an amendment

from the previous version.

The content and format of this MSDS is in accordance with the **MSDS** Regulation

OSHA Hazard Communication Standard, 29 CFR 1910.1200.

MSDS Distribution The information in this document should be made available to

all who may handle the product.

Disclaimer : The information contained herein is based on our current

> knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental

Print Date 02/07/2011 MSDS US

MSDS# 10532
Version 1.0
Effective Date 09/23/2008
According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

Material Safety Data Sheet

requirements only. No warranty or guarantee is expressed or implied regarding the accuracy of these data or the results to be obtained from the use of the product.

Print Date 02/07/2011 MSDS_US