

MATERIAL SAFETY DATA SHEET (MSDS)

Section 1. PRODUCT & COMPANY IDENTIFICATION:

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|---|---|
| Trade Name | SAFEGUARD BIOSOLV ^{C6} AR-AFFF-3/3% (Type 3/3) |
| Chemical Classification | N/A |
| CAS Number | Mixture |
| Hazchem Number | N/A |
| Application & use | Fire Fighting Foam Concentrate (Fire Extinguishing agent) |
| Manufacturer | SAFEGUARD FIRE PROTECTIONS PVT. LTD., B-3, Mangolpuri, Industrial Area, Phase -II, New Delhi- 110034 (India), Mob: +91 9818272647 |
| Emergency phone no. for information & supply | +91 9818272647 |

Section 2. INGREDIENT - COMPOSITION INFORMATION:

| MAJOR INGREDIENTS | CAS.No. |
|--------------------------------|------------|
| 1. C6 based Fluoro-surfactants | Mixture |
| 2. Solvent | 34590-94-8 |
| 3. Hydrocarbon surfactant | Mixture |
| 4. Stabiliser | 102-71-6 |
| 5. Biogum | 11138-66-2 |
| 6. Water | 7732-18-5 |

Section 3. HAZARD IDENTIFICATION:

| | | | |
|--|-------------|-----------------------------|--|
| Flammability | | Corrosive Material | Little corrosive to metals like MS, Bronze, Aluminum |
| LEL %v | N/A | | |
| UEL %v | N/A | | |
| TDG Flammability | N/A | Organic Peroxide | No |
| Explosion Sensitivity to impact | None | Autoignition Temperature °C | N/A |
| Flammable Material | No | Hazardous Polymerization | Will not occur |
| Oxidizer | No | Explosive Material | No |
| Flash Point | No flash | Pyrophoric Material | No |
| Explosion Sensitivity to Static Electricity | None | Others | N/A |
| Combustible Liquid | No | | |
| Hazardous Combustion Products: Not known. However oxides of carbon, nitrogen and sulfur may be formed during use for extinction of fire. | | | |
| NFPA Hazard Signals | Health 1 | Flammability 0 | Stability 0 Special N/A |

EMERGENCY OVERVIEW:

| FIRE | |
|--------------------------|---|
| Fire Extinguishing Media | Material is itself a fire extinguishing agent |
| Special Procedures | None |
| Unusual Hazard | None |
| EXPOSURE | |
| User guidelines | Avoid getting chemicals on you or in you. Cause eye-irritation and may cause skin irritation. Swallowing large amount of chemicals may cause injury or irritation |
| SPILLS | |
| Steps to be taken | Stop leak. Collect spilled concentrates. Rinse the affected area with plenty of water until it no longer foams. Care should be taken to avoid slip hazard. |

Section 4. FIRST AID MEASURES:

Flush eyes with water at least for 15 minutes. Remove contaminated clothing. Wash skin with ample water several times. If ingested, have victim drink water and obtain medical attention immediately.

Section 5. FIRE FIGHTING MEASURES:

| | | | |
|---------------------------------|---|--|------|
| Fire Extinguishing Media | Material is itself a fire extinguishing agent | TDG Flammability | NA |
| Unusual Hazard | None | Explosion Sensitivity to impact | None |

Section 6. ACCIDENTAL RELEASE MEASURES:

Stop leak. Use appropriate protective equipment during cleanup. Collect spilled concentrates. Rinse the affected area with plenty of water until it no longer foams. Care should be taken to avoid slip hazard. Disposal should be made in accordance with federal, state and local regulations.

Section 7. HANDLING & STORAGE:

Handling: Avoid getting chemicals on you or in you. Wash hands after handling chemicals. Don't eat or drink while handling chemicals.

Storage: NO Special conditions are required for safe storage. Store in original container. As much as possible keep from being washed into surface water.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

Avoid getting chemicals on you or in you. Use tightly sealed safety glass or goggles for eye protection, use PVC/Nitrile or butyl rubber gloves, apron and rubber boots for skin protection.

Section 9. PHYSICAL & CHEMICAL PROPERTIES:

| | | | |
|---------------------|-----------------|----------------------------|---------------------|
| Physical State | Viscous Liquid | Vapour Density (Air=1) | Data not available |
| Odour | Characteristic | Specific gravity (Water=1) | 1.00-1.04 at 20±1°C |
| Appearance | Amber | Vapour Pressure | Data not available |
| Boiling point/Range | 100°C (Initial) | @35°C, mm Hg | |
| Freezing point | Below (-)2°C | Solubility in water @30°C | 100% Soluble |
| | | pH | 6.5-8.5 at 20±1°C |

Section 10. STABILITY & REACTIVITY:

| | |
|-------------------------------------|---|
| Chemical Stability | Stable |
| Incompatibility with other material | Avoid use of product on burning metals, electrically energized equipment and contact with water reactive material |
| Reactivity | None |
| Hazardous Reaction Products | Not known |

Section 11. TOXICOLOGICAL INFORMATION

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|--|---|
| Effects of exposure/Symptoms | Cause eye-irritation and may cause skin irritation. Swallowing large amount of chemicals may cause injury or irritation |
| Permissible Exposure Limit, LD ₅₀ | >7gm/Kg body wt. of rat (oral) |

Section 12. ECOLOGICAL INFORMATION;

This product is an ecologically inert material. It does not contain ozone depleting substances and is not expected to exert an eco-toxic effect or bio-accumulated in the food chain.

Section 13. DISPOSAL CONSIDERATION:

Prevent discharge foam/foam solution to waterways without treatment. Waste disposal should be made in accordance with central, state and local regulations. Waste may be incinerated or disposed of by treatment at a permitted facility only with permission or as advised by competitive authority.

Section 14. TRANSPORT INFORMATION

Department of Transportation (DOT) : Not classified.

Section 15. REGULATORY INFORMATION

| | |
|-------------------------|-----|
| Shipping Name | N/A |
| Shipping Code/Label | N/A |
| Hazardous waste I.D. No | N/A |

Section 16. OTHER INFORMATION

KEY

- CAS : Chemical Abstracts Service
- DOT : Department of Transportation
- NFPA : National Fire Protection Association
- TDG : Transportation of dangerous goods.
- UEL : Upper exposure limit
- LEL : Lower exposure limit.

DISCLAIMER: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.