

Revision Date: 27/4/2017

Safety Data Sheet

Section 1: Product and Company Identification					
Product: Solvent flush	SDS No: KLXFL200215				
Product Use: Cleaning liquid for printheads					
Manufacturer's Name: Rex-Tone Industries Ltd.					
Street Address: Unit II , C-1/351/4 G.I.D.C	Street Address: Makarpura				
City: Vadodara	State/County: Gujrat				
Postal Code: 390010	Emergency Telephone: 91-265-2830028/29				
Date SDS Prepared: 20/02/2015, Date of revision: 27/4/2017					

Section 2: Hazards Identification

Hazard classification:

Pictograms:





Physical hazards

Flammable liquids Category 4

Health hazards

Acute toxicity (Oral) Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Aspiration hazard Category 1

OSHA Specified Hazards: not applicable

Hazard Statement(s):

H227: Combustible liquid

H304: May be fatal if swallowed and enters airways.

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

Precautionary statement:

Prevention:



Revision Date: 27/4/2017

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P370+P378: In case of fire; Use water spray, carbon dioxide, dry chemical

or alcohol foam for extinction.

P302+P352: If on Skin: Wash with plenty of soap and water.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P363: Wash contaminated clothing before reuse.

P305+P351+P338: If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P301+P310: If Swallowed: Immediately call a poison center or doctor/physician.

P331: Do NOT induce vomiting.

Storage:

P403+P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Potential Acute Health Effects:

Can tint skin, eyes, clothing, flooring etc. Hazardous in case of ingestion. Hazardous in case of skin contact (irritant, can permeate), of eye contact (irritant, causes redness of cornea), of inhalation. Can cause irritation of mouth, nasal passage and throat

Potential Chronic Health Effects:

Hazardous in case of ingestion. Hazardous in case of skin contact (irritant, permeator), of eye contact (irritant, causes redness of cornea), of inhalation.

Carcinogenic Effects: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available. Chronic Effects/Target organs: Reports have associated repeated and prolonged occupational overexposure to solvent with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.



Revision Date: 27/4/2017

Animal Studies: Glycol Ether and its acetate are known to have caused reproductive and blood disorders resulting in kidney, liver and lung damage in lab animals. For animal studies, reference TSCA Section 4 test rule results or contact the manufacturer for further details.

Medical Conditions Aggravated by Exposure: Pregnant women and persons with pre-existing health disorders should consult their physician before using this product. Repeated and prolonged overexposure and/or individual sensitivity may increase for and degree of adverse health effects.

Section 3: Composition				
Sr. No.	Product Name	CAS#	% by weight	
1	Alkyl Glycol Ether compound or their mixtures or acetates	Proprietary	>96%	
2	Additives	Proprietary	<4%	

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:

In case of contact, immediately flush skin with plenty of water and wash with soap. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **Serious Ingestion:** Not available.

Ingestion: In case of ingestion, do not induce vomiting. Call a physician, contact poison control center.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: >200°C

Flash Points: >70°C

Flammable Limits: LOWER: 0.8% UPPER: 5%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances: Not available.



Revision Date: 27/4/2017

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Use class B extinguishing agents. Use dry carbon dioxide or dry chemical extinguishers in case of fire.

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available

Section 6: Accidental Release Measure

In case of accidental spill, ensure that all equipment used is fire proof, ventilate the area in keeping with the good chemical practices norms/ local air exposure norms in check, absorb spill with inert absorbent. Use Nonsparking tools. Dispose in waste container with Fire Hazard markings.

Section 7 Handling and Storage

Precautions:

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk; evaporate the residue under a fume hood. Ground all equipment containing material.

Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Control and Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:

Use nitrile gloves, Splash goggles, Lab coat and Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Nitrile Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.



Revision Date: 27/4/2017

Section 9: Physica	I and Chemical	Properties
--------------------	----------------	------------

Properties	Data	Properties	Data
Appearance	Cyan/Magenta/Black or Yellow	Odor	Mild
Boiling Point	> 130 Deg. C. (estimated)	Freezing Point	Not Determined
Density	About 1 g/cc (25)	Vapor Pressure	< 4 mmHg(@ 20 Deg.C.)
Vapor density	>1	Viscosity @ 25 Deg. C.	Between 8–15 mpas.

Section 10: Stability and Reactivity

Flash Point: > 70 Deg. C. (approximate 72 Deg. C.)

Flammability: Non Flammable, Under 49 CFR, 173.120 as Flash Point is above 60 Deg. C.

Self-reactivity/ Explosive: Under closed container conditions at high temperatures the product can be explosive in nature due to vapor pressure generated inside the container. In case of fire, keep the containers cool by spray water on them.

Reactivity: None

Chemical Stability: Stable

Conditions to Avoid: Avoid excessive heat, ignition sources, sparks and open flame.

Incompatibility with other materials: Strong acids/bases, oxidizing /reducing agents and reactive chemicals.

Hazardous Decomposition Products: May produce hazardous fumes when heated to decomposition e.g.

carbon monoxide, carbon dioxide and other noxious gases.

Hazardous Polymerization: Not anticipated during normal printing and storage conditions.

Section 11: Toxicological Information

The product being used consists of Solvents, additives and pigments and thus precaution should be taken to ensure that the exposure to the same is restricted.

Specific products for which information is available with us are:

Glycol ethers mixture – One of the components is said to have the following data

Oral LD50 Rat: 2400 mg/Kg Dermal LD50 Rabbit: 1500 mg/Kg

Cyclohexanone - Oral LD50 rat: 1620 mg/Kg Dermal LD 50 Rabbit: 1000 mg/Kg

Inhalation TCLO Human: 75 ppm.

Section 12: Ecological Information

This product is insoluble in water. Treat using the best available techniques to avoid environmental



Revision Date: 27/4/2017

contamination. As this product maybe a mixture of chemicals, some of which may be ecologically toxic, it is strongly recommended that it is not disposed of into the environment. i.e soil, water, lakes, landfills, sewers etc.

Section 13: Disposal Consideration

Waste Disposal Method: Dispose of in accordance with all applicable local governmental regulation. Prevent from entering drains, sewers, streams or other bodies of water without complete treatment as per local use. It is the Responsibility of the user to determine if local, county, state or provincial regulations may also apply to the disposal of this product and /or the container.

Section 14: Transport Information

Not Regulated. The product(s) described by this MSDS are NOT classified as Hazardous Material/ Dangerous Goods as defined by the US DOT, ICAO, IMO or TDG.

Observe side up markings. Avoid getting package wet. Handle with care if package seal is broken. Do not stack packages more than five high. Comply with relevant shipping regulation.

Section 15: Other Regulatory Information

Follow all regulatory requirements applicable to your area.

Sara Title III 313 Information – Glycol Ether and their acetates as mixtures are classified for reporting under this.

Toxic Substances Control Act (TSCA) Status

All Ingredients in Section 2 are listed on the U.S. Environmental Protection agency TSCA inventory.

WHMIS Classification (Canada):

B3_Combustible Liquids: D1B_ Material causing immediate and serious toxic effects, toxic material: D2B_ materials causing other Toxic effects, toxic material.

Section 16: Other Information

HMIS® Hazard Ratings: Health - 2, Flammability - 3, Chemical Reactivity - 1

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.