VIKAS ECOTECH LTD.
(Formerly Vikas GlobalOne Ltd.)

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Material Safety Data Sheet

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ADDFLEX

CHLORINATED PARFFINS (CPW)

SECONDARY PLASTICIZERS

- *Product Description:*

- It is a transparent viscous liquid having distinct sweet odour. It is essentially insoluble in water but soluble in other chlorinated solvents. Chlorinate Paraffin's (CPS) are straight-chain hydrocarbons that have been chlorinated. Chlorinated Paraffin's are classified according to their carbon-chain length and percentage of chlorination, with carbon-chain lengths generally ranging from C_{10} to C_{20} and chlorination from approximately 40% to greater than 70% by weight. Chlorinated Paraffin's are made by chlorinating paraffin fractions obtained from petroleum distillation. The three most common commercial feedstocks used are paraffin's with carbon number ranges of: short-chain (C10-13), intermediate-chain (C14-17) and long-chain (C18-30).

- *CAS No.* **85535-85-9**

- *Physical & Chemical Properties:*

			CP45	CP52
S. No.	**PARTICULARS**	**TEST METHOD**	**STANDARD**	**STANDARD**
1	Appearance	-	Clear to Pale Yellow viscous Liquid	Clear to Pale Yellow viscous Liquid
2	Chlorine Content %	ISI- 1448-77	45 ± 2.0	52 ± 2.0
3	Color in Hazen Units (HU)	ASTM-D-1045-86	60 Max	60 Max
4	Specific Gravity @ 30 °C	ASTM-D-1045	1.20 ± 0.02	1.28 ± 0.02

5	Viscosity @ 27 °C, Poise	ASTM-D-445 Brookfield Viscometer	0.5 – 10	12 – 35
6	Free Mineral Acidity as mg KOH / gm	KOR/QCD/FP-1.5	0.010 Max	0.010 Max
7	Free Chlorine, %	ISI-9189-79	NIL	NIL
8	Heat Stability @ 180 °C for 20 min.	KOR/QCD/FP-1.9	Color changes to yellow	Color changes to yellow
9	Thermal Stability after 4 hrs. @ 175 °C	KOR/QCD/FP-1.8	0.10 Max	0.10 Max
10	Volatile loss @ 180 °C for 4 hrs., percent by mass	KOR/QCD/FP-1.7	2.50 Max	3.00 Max
11	pH Value of 10 % aqueous extract	KOR/QCD/FP-1.11	6.0 ± 0.5	6.0 ± 0.5

Note: Specific grades of Chlorinated Paraffin's can be prepared on Request.

➢ *PRODUCT USE:*

- It is used as plasticizers used to impart flexibility and flame retardant quality to PVC compounds, cables, Footwear's, Flooring, Films, and Sheets etc. with Phthalate Plasticizers.
- CPW is used by ink, paints and adhesives manufacturers.
- CPW is used as flame retardant.
- CPW is used in the production of PVC flexible gardening pipes, pressure pipes, hosing etc.
- CPW is used in the production of PVC - Plastisols coating/artificial leather cloth Industries
- CPW is used in the production of PVC – extrusion/other applications
- CPW is used in the production of plastic/rubber.
- CPW is used in formulation and use in metal cutting/working fluids.

➢ *POTENTIAL HAZARDS INFORMATION:*

- FIRE HAZARD:

❖ Extinguishing media

- **Suitable extinguishing agents:** CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.

* **NOTE: Advice for fire fighters:**

- Decomposes on heating emitting toxic fumes. If safe to do so, remove containers from path of fire.

* **Protective equipment:**

- Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

REACTIVITY:

❖ Chemical stability

- **Thermal decomposition / conditions to be avoided:**
- The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
- **Possibility of hazardous reactions No dangerous reactions known.**

NOTE: Conditions to avoid

- Avoid exposure to heat, sources of ignition, and open flame.
- Prolonged heating at temperatures in excess of 70°C or heating above 200°C for short periods of time will result in decomposition and liberation of hydrogen chloride.
- Avoid contact with oxidising agents.

❖ **Incompatible materials:**

- Strong oxidizing and reducing agents.
- Strongly alkaline.
- Alkali metals and alkaline earth metals (those with a strong affinity for chlorine).
- Iron, Aluminium and Zinc at high temperatures (which will catalyze decomposition)
- Heat and hot surfaces.

❖ **Hazardous decomposition products:**

- Hydrogen chloride (Hcl)
- Chlorine compounds
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- **HEALTH HAZARDS:**
- Available evidence from animal studies indicate that repeated or prolonged exposure to this

material could result in effects on the liver and kidneys.

❖ **On the skin:**

- Contact with skin may result irritation
- Repeated exposure may cause skin dryness or cracking

❖ **On the eye:**

- Likely to cause slight eye irritation.

❖ **Sensitization:**

- No sensitizing effects known.

* Material may accumulate in body tissues and fluids rich in lipid content hence may cause harm to breastfed babies.

➢ **<u>FIRST AID MEASURES:</u>**

- **General Information:** If the user feels unwell, medical advice should always be sought immediately.

- **After inhalation:**

1. Immediately remove from exposure into fresh air.
2. Keep warm at rest.
3. Seek medical advice immediately.

- **After skin contact:**

1. Wash off immediately with plenty of soapy water for atleast 15 minutes.
2. Immediately remove contaminated clothing, and any extraneous chemical.
3. In case of any skin reaction or soreness,
4. Seek medical advice.

- **After eye contact:**

1. Rinse immediately with plenty of luke-warm water also under the eyelids for at least 15 minutes.
2. Remove contact lenses.
3. Seek medical advice.

- **After swallowing:**

1. Wash out mouth with clean water.
2. Give 300ml water to drink.
3. Do not induce vomiting.
4. If vomiting occurs, keep head lower than hips to help prevent aspiration.
5. If person is unconscious, turn head to side.
6. Obtain medical help immediately.

➢ *HANDLING & STORAGE:*

HANDLING:

- **Precautions for safe handling**

1. Keep containers closed when not in use.
2. Keep away from incompatible materials.
3. People working with this chemical should be properly trained regarding its hazards and safe use.

- **Information about fire - and explosion protection:** No special measures required.

- **Conditions for safe storage, including any incompatibilities :**

Avoid PVC and rubber gaskets and hoses

STORAGE:

- **Requirements to be met by storerooms and receptacles:**

1. Store in original containers in a cool place and away from all sources of heat and direct sunlight
2. Protect from damage.
3. Keep dry.

- **Information about storage in one common storage facility:**

1. It is a good practice to keep storage containers tightly closed when not in use.
2. Ideal storage temperature is 10 to 27°C.
3. Do not expose sealed containers to temperatures greater than 40 °C.

➢ *TRANSPORTATION:*

- **Shipping Name:** Chlorinated Paraffin's

- **Hazardous Class:** Non Hazardous
- **UN Number:** NA
- **Packing Group:** 0

➢ *DISPOSAL:*

❖ **Waste treatment methods**

Recommendation

- Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Refer to Waste Management Authority. Dispose of material through a licensed waste contractor

❖ **Unclean packaging:**

Recommendation: Disposal must be made according to official regulations.

➢ *PREPARED BY:* SR. CHEMICAL ENGINEER

Disclaimer: