SAFETY DATA SHEET

Revision: 13, 12, 2013

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Substance name : Remover PC-18

Product Type : Solvent

Details of the supplier of the Safety Data Sheet Manufacturer/Supplier : Florex CO.,LTD.

Street address/P.O. Box: INTEX BLDG.6F, 2-25-1, Nishi-Gotanda, Shinagawa-ku, Japan

Telephone number(if possible, indicate telefax)

: Tel: +81-3-3495-0991 Fax: +81-3-3495-0993

e-mail address of competent person responsible for the SDS

: h-kubo@florex.co.jp

Emergency telephone number

Opening hours : AM9:00-PM5:30
Other comments (e.g. language(s) of the phone service) : Tel:+81-3-3495-0991

SECTION 2: Hazards identification

Classification of the GHS

Physical Hazards

Flammable liquids : Category2
Pyrophoric liquids : Not classified

Self heating substances and mixtures : Classification not possible Corrosive to metals : Classification not possible

Health Hazards

 Skin corrosion/irritation
 : Category2

 Serious eye damage/eye irritation
 : Category2Aor2B

 Germ cell mutagenicity
 : Category1B

 Toxic to reproduction
 : Category1A

 Specific target organs systemic toxicity following single exposure

: Category3 (respiratory tract irritation, narcotic)

Specific target organs systemic toxicity following repeated exposure

: Category1(liver), Category2(nervous system)

Environmental Hazards : Not classified

Pictograms or hazard symbols







Signal word Hazard statements

: Danger

: Causes skin irritation

: Causes serious eye irritation

Precautionary statements

Prevention: Wash hands thoroughly after handling.

: Wear protective gloves/eye protection/face protection.

Response

IF IN EYES : Rinse cautiously with water for several minutes.

: Remove contact lenses, if present and easy to do. Continue rinsing.

: If eye irritation persists: Get medical advice/attention.

IF ON SKIN : Gently wash with plenty of soap and water.

: If skin irritation occurs:Get medical advice/attention. : Take off contaminated clothing and wash before reuse.

SECTION 3: Composition/information on ingredients

Ingredient	CAS No.	EINECS No.	% by Wt
Propylene carbonate	108-32-7	203-572-1	40-60
Ethyl alcohol	64-17-5	200-578-6	35-45
Isopropyl alcohol	67-63-0	200-661-7	5-10
Hydroxy propyl cellulose	9004-64-2	220-971-6	1-2

SECTION 4: First aid measures

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact

Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Ingestion

Get medical advice/attention if you feel unwell. Rinse mouth.

Protection of first aiders

A rescuer should wear personal protective equipment, such as rubber gloves and air tight goggles.

SECTION 5: Fire fighting measures

Suitable extinguishing media

Dry chemical, foam, water spray, carbon dioxide.

Extinguishing media not to be used

Solid streams of water.

Specific methods

Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.

Special protective equipment for firefighters

When extinguishing fire, be sure to wear personal protective equipment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Environmental precautions

Prevent product from entering drains.

Methods and materials for containment and cleaning up

Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

SECTION 7: Handling and storage

Handling

Technical measures

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapor or mist. Wash hands and face thoroughly after handling. Use a ventilation, local exhaust if vapor or aerosol will be generated.

Advice on safe handling:

Avoid contact with skin, eyes and clothing.

Storage

Storage conditions

Keep container tightly closed. Store in a cool and dark place.

Store under inert gas.

Protect from moisture.

Store away from incompatible materials such as oxidizing agents.

Packaging material

Law is followed.

SECTION 8: Exposure controls/personal protection

Engineering controls

Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.

Control parameters : Not set up

Personal protective equipment

Respiratory protection: Vapor respirator. Follow local and national regulations.

Hand protection : Protective gloves.

Eye protection : Safety glasses. A face-shield, if the situation requires.

Skin and body protection: Protective clothing. Protective boots, if the situation requires.

SECTION 9: Physical and chemical properties

Physical state : Liquid.
Appearance : Colorless

Odour : Characteristic redolence

pH : Not applicable.

Boiling point : 78.32°C/101.325kPa (Ethyl alcohol)

Melting point: -114.5°C (Ethyl alcohol)Flammability (solid, gas): No data available.Explosive properties: Not classifiedOxidising properties: Not classifiedFlash point: 13°C(Ethyl alcohol)Autoignition temperature: No data available.

Autoignition temperature: No data available.Flammable Limits(LEL): 3.3% (Ethyl alcohol)Flammable Limits(UEL): 19.0% (Ethyl alcohol)

Vapour pressure : 5.88kPa/20°C

Water solubility : Nil

Partition coefficient: n-octanol/water : No data available.

Evaporation rate : Negligible

Vapour density : No data available.
Viscosity : 500-1500 mPa.s/20°C

Density : 0.95-0.96 g/ml

SECTION 10: Stability and Reactivity

Stability : Stable under proper conditions.

Reactivity : No sspecial reactivity has been reported.

Conditions to avoid : Hygroscopic

Incompatible materials : oxidizing agents, acids, bases, reducing agents

Hazardous Decomposition Products : Carbon monoxide, Carbon dioxide

SECTION 11: Toxicological information

Serious eve damage/irritation

 Acute Toxicity
 : orl-rat LD50
 29100uL/kg

 : scu-rat LD50
 11100mg/kg

Skincorrosion/irritation : skn-hmn 100mg/3D-I MOD

: skn-rbt 500mg MOD : eye-rbt 60mg MOD

Germ cell mutagenicity : No data available
Carcinogenicity : IARC=No data available

: NTP=No data available

Reproductive toxicity : No data available

RTECSNumber : FF9650000

SECTION 12: Ecological information

Ecotoxicity:

Fish : No data available
Crustacea : No data available
Algae : No data available

Persistence/degradability: 68-89%(by BOD), 67-92%(by TOC), 76-100%(by GC)

*The substance was determined as "Ready biodegradability"

under the Chemical Substances Control Law.

Bioaccumulative potential(BCF) : 3

Mobillity in soil

 $\begin{array}{lll} \mbox{log Pow} & : -0.41 \\ \mbox{Soil adsorption(Koc)} & : 14 \\ \mbox{Henry's Law constant(PaM³/mol)} & : 3.4 \times 10^{-3} \end{array}$

SECTION 13: Disposal considerations

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

SECTION 14: Transport Information

Hazards Class : Does not correspond to the classification standard of the United Nations

UN-No : Not Listed

SECTION 15: Regulatory Information

Fire Defense Law: Class-4No.3petroleums Dangerous grade3 Not water-soluble fluid

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.