

PRODUCT SAFETY DATA SHEET

HOROLENE CONCENTRATED CLOCK CLEANER

Product Description

An alkaline, water miscible liquid, containing a mixture of organic solvents, suitable for removing grease, oil, dirt and tarnish.

For use in clock, watch and brass instrument cleaning.

Directions

Dilute Horolene Concentrate in the ratio of 1 part of Horolene to 7 parts of water, and pour into a suitable container with a closed lid. Useful for this are polythene ice cream cartons or a plastic bucket for larger items.

Fully immerse all items to be cleaned in the solution, and soak for the period of time necessary to remove tarnish. Each piece varies depending on how badly tarnished it is. To hasten the process you may lightly brush objects during treatment (an old tooth brush is ideal for this). When the required finish is obtained, remove items and rinse thoroughly with hot water. Shake off excess moisture, and dry completely. A fan heater is helpful for this.

The concentrate should be left in its original container, and only diluted before actual usage. Any change in colour which takes place will not affect the efficiency of the cleaner.

HEALTH & SAFETY (This data refers to the concentrate)

R11	Highly flammable
R34	Causes burns
R37	Irritating to the respiratory system.
R50	Very toxic to aquatic organisms
S2	Keep out of reach of children
S16	Keep away from sources of ignition. No smoking.
S23	Do not breathe vapour / spray
S36/37/39	Wear suitable protective clothing, gloves and eye / face protection.
S51	Use only in well ventilated area.

PRODUCT SAFETY DATA SHEET

1) IDENTIFICATION

Product Name: Horolene Concentrate
Supplier: Horological Solvents Ltd
Barnside, 194 Wellington Road, Bury. Lancs BL8 2NY
Telephone : 0161 764 2741 Fax: 0161 764 8696

2) COMPOSITION / INFORMATION ON INGREDIENTS

<u>Materials</u>	<u>CAS number</u>	<u>Level</u>	<u>Hazards (see section 16)</u>
Ammonia	1336-21-6	5-15%	C R34 R37 R50
Propanone	67-64-1	15-30%	F R11 Xi R36 R66 R67
IMS	8013-52-3	15-30%	F R11 Xn R20/21/22 R68
Butyle Acetate	123-86-4	15-30%	OES

3) HAZARDS IDENTIFICATION (Undiltued Product)

CHIP classification : Highly flammable, Corrosive, Dangerous for the environment

Eye Contact: Will cause severe irritation and damage.
Skin Contact: Causes burns.
Respiratory hazard: Irritating to respiratory system.
Flammability: hazard: Highly flammable.

4) FIRST AID MEASURES

Eye Contact: Immediately flush eyes with water, holding eyelids apart, for at least for 10 minutes. Seek medical assistance immediately.
Skin Contact: Remove contaminated clothing, wash skin with soap & water. Seek medical attention immediately.
Inhalation: I irritation occurs, remove to fresh air, keep warm and at rest. Seek medical attention immediately.
Ingestion: Do not induce vomiting. Seek medical assistance immediately.

5) FIRE FIGHTING MEASURES

Use foam, dry powder or carbon dioxide.

6) ACCIDENTAL RELEASE MEASURES

Exclude sources of ignition, provide ventilation.
Absorb using sand or other inert materials and transfer to suitable containers for disposal.

7) HANDLING & STORAGE

Store in a cool, dry place protected from frost and away from acids, strong oxidising agents and sources of ignition. Store upright in original container.

Shelf life : months in good conditions.

8) EXPOSURE CONTROLS / PERSONAL PROTECTION

These measures are suggested on the basis of general use methods and may not be appropriate to all potential uses of the product. The user is responsible for carrying out a full risk assessment of their specific processes and systems of work.

Eye Protection: Wear a full face visor to BS EN 166 39B
Hand Protection: Wear nitrile or neoprene gloves. Exact choice of glove depends on specific risk assessments.
Body Protection: As necessary to prevent contact.
Respiratory: Use in a well ventilated area. Avoid breathing vapour or protection spray. Wear a respirator if necessary.
Other Protection: Local exhaust ventilation may be required.

Personal Protective Equipment : Exact PPE requirements should be determined from a specific risk assessment of the processes being carried out.

OCCUPATIONAL EXPOSURE LIMITS

Ammonia	35ppm	OES 8 hour TWA
Propanone	500ppm	OES 8 hour TWA
Butyl Acetate	150ppm	OES 8 hour TWA
Methanol/Ethanol ppm	200/1000	OES 8 hour TWA

9) PHYSICAL & CHEMICAL PROPERTIES

Appearance: Colourless / pale yellow liquid
Odour: Characteristic, ammonia
PH: 14 as supplied (typical)
Boiling Point: 58°C
Melting Point: Not applicable
Flash Point : > 23°C
Auto-ignition temp: >200°C
Explosive Properties: Not applicable.
Oxidising Properties: Not applicable
Vapour Pressure: No data
Relative Density: at 20°C : 0.852
Solubility: Miscible with water
Viscosity: Free flowing

10) STABILITY AND REACTIVITY

Conditions to avoid: Extremes of temperature. Sources of ignition.
Materials to avoid: Incompatible with strong oxidising agents & acids..
Hazardous Decomposition: May produce toxic fumes in fire.

11) TOXICOLOGICAL INFORMATION

Eye Contact: Will cause severe irritation and damage.
Skin Contact: Causes burns.
Inhalation: Irritating to respiratory system.
Ingestion: Will cause severe irritation and damage.
Long Term: Based on current knowledge, no long term effects are anticipated if used correctly.

12) ECOLOGICAL INFORMATION

May affect aquatic organisms due to hydrocarbon content if released into water courses untreated.

13) DISPOSAL CONSIDERATIONS

Dispose of surplus product and packaging via a licensed chemical waste contractor.
Dispose of used cloths carefully – fire hazard

14) TRANSPORT INFORMATION

Transport Classification : Flammable

UN Number 2924

Transport Class : 3 Packing Group : 2

15) REGULATORY INFORMATION

CHIP Classification: Highly flammable, Corrosive, Dangerous for the environment.

R11 Highly flammable
R34 Causes burns.
R37 Irritation to respiratory system
R50 Very toxic to aquatic organisms
S2 Keep out of reach of children
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S16 Keep away from sources of ignition, no smoking.
S23 Do not breathe vapour / spray
S51 Use only in well ventilated areas.

Relevant UK law : Chemicals (hazard information and packaging) Regulations (CHIP)
Control of substances hazardous to health regulations (COSHH, COSHH essentials)
For guidance see www.hse.gov.uk, www.dti.gov.uk/chemicals

(16) OTHER INFORMATION

R phrases relating to ingredients (see section 2)

R11	Highly flammable
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R34	Causes burns
R37	Irritating to respiratory system
R50	Very toxic to aquatic organisms
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapours may cause drowsiness and dizziness
R68	Possible risk of irreversible effects

This product should be stored, handled and used in accordance with good industrial practise and in conformity with legal regulations. The information in this data sheet is based on the present state of our knowledge and is intended to describe products from the point of view of safety requirements and thus should not be construed as guaranteeing specific properties. It is for users to satisfy themselves of the suitability of this product for their own applications.

Date of printing :