

Material Safety Data Sheet

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Version 1.3

According to 91/155/EEC

1 - Product and Company Information

Product Name HYDRANAL-SOLVENT CM, SOLVENT COMPONENT
F OR VOLUMETRIC KF TITRATION IN OILS
&FATS

Product Number 34812

Company Sigma-Aldrich Company Ltd.
The Old Brickyard
New Road, Gillingham SP8 4XT
United Kingdom

Technical Phone # 44-(0)-1747-833000

Fax 44-(0)-1747-833313

Emergency Phone # 44-(0)-1747-833100

2 - Composition/Information on Ingredients

Product Name		CAS #	EC no	Annex I Index Number
HYDRANAL SOLVENT CM		None	None	None
Ingredient Name	Percent	CAS #	EC no	Annex I Index Number
CHLOROFORM	>= 60	67-66-3	200-663-8	602-006-00-4
Carc. Cat.3				
Symbols: Xn				
R-Phrases: 22 38 40 48/20/22				
Harmful if swallowed. Irritating to skin. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.				
METHANOL	>= 10 <= 30	67-56-1	200-659-6	603-001-00-X
Symbols: F T				
R-Phrases: 11 23/24/25 39/23/24/25				
Highly flammable. Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.				
IMIDAZOLE	>= 10 <= 30	288-32-4	206-019-2	None
Symbols: C				
R-Phrases: 22 34				
Harmful if swallowed. Causes burns.				
SULFUR DIOXIDE	>= 1 <= 5	7446-09-5	231-195-2	None
Symbols: T				
R-Phrases: 23 34				
Toxic by inhalation. Causes burns.				

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Harmful by inhalation, in contact with skin and if swallowed.
Irritating to respiratory system and skin. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Limited evidence of a carcinogenic effect. Risk of serious damage to eyes. Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard them after use.

METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated

exposure.

STORAGE

Conditions of Storage: Keep tightly closed.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator in nonventilated areas and/or for exposure above the TLV or PEL.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance	Color: Colorless Form: Clear liquid	
Property	Value	At Temperature or Pressure
pH	6 - 7	20 °C
BP/BP Range	60 - 65 °C	
MP/MP Range	N/A	
Flash Point	100 °C	Method: closed cup
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	1.33 g/cm ³	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

10 - Stability and Reactivity

STABILITY

Stable: Stable.

Conditions of Instability: May decompose on exposure to light.

Materials to Avoid: Strong oxidizing agents, Strong bases, Magnesium, Sodium, Lithium, Plastics.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide,

Sulfur oxides, Nitrogen oxides, Hydrogen chloride gas, Phosgene gas.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11 - Toxicological Information

SIGNS AND SYMPTOMS OF EXPOSURE

Exposure can cause: Vomiting. Gastrointestinal disturbances. Exposure to and/or consumption of alcohol may increase toxic effects. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.
Skin Absorption: May be harmful if absorbed through the skin. Skin absorption may occur.
Eye Contact: Causes eye irritation.
Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. Toxic if inhaled.
Ingestion: Toxic if swallowed.

TARGET ORGAN INFORMATION

Cardiovascular system. Central nervous system. Blood. Liver. Kidneys. Eyes. Heart.

CHRONIC EXPOSURE - CARCINOGEN

Result: This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. The National Cancer Institute (NCI) has found clear evidence for carcinogenicity.

CHRONIC EXPOSURE - MUTAGEN

Result: Laboratory experiments have shown mutagenic effects.

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

UN#: 2810
Class: 6.1
PG: III
Proper Shipping Name: Toxic liquid, organic, n.o.s.

IMDG

UN#: 2810
Class: 6.1
PG: III
Proper Shipping Name: Toxic liquid, organic, n.o.s.
Marine Pollutant: No

Severe Marine Pollutant: No
Technical Name: Required

IATA

UN#: 2810
Class: 6.1
PG: III
Proper Shipping Name: Toxic liquid, organic, n.o.s.
Inhalation Packing Group I: No
Technical Name: Required

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: T
Toxic.

R-PHRASES: 20/21/22 37/38 39/23/24/25 40 41 48/20/22
Harmful by inhalation, in contact with skin and if swallowed.
Irritating to respiratory system and skin. Toxic: danger of
very serious irreversible effects through inhalation, in
contact with skin and if swallowed. Limited evidence of a
carcinogenic effect. Risk of serious damage to eyes. Harmful:
danger of serious damage to health by prolonged exposure
through inhalation and if swallowed.

S-PHRASES: 26 36/37/39 45

In case of contact with eyes, rinse immediately with plenty of
water and seek medical advice. Wear suitable protective
clothing, gloves, and eye/face protection. In case of accident
or if you feel unwell, seek medical advice immediately (show
the label where possible).

NORWAY

Labelling for organic solvents where the package is 1 liter or
more.

YL-tall m3/l: >180000

YL-group: 5

Safety phrases: 38 42 210

In case of insufficient ventilation, wear suitable respiratory
equipment. During fumigation/spraying wear suitable respiratory
equipment. Use compressed air- or fresh air line breathing
apparatus in confined spaces.

16 - Other Information

WARRANTY

The above information is believed to be correct but does not
purport to be all inclusive and shall be used only as a guide. The
information in this document is based on the present state of our
knowledge and is applicable to the product with regard to
appropriate safety precautions. It does not represent any
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