

SAFETY DATA SHEET

According to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication.

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

1.1. Product identifier

Product name: **VIASOL 445**

Type of product: Mixture.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Processing aid for industrial applications.

Uses advised against: All non-professional uses.

1.3. Details of the supplier of the safety data sheet

Company: Viachem Ltd.
2701 Dallas Parkway,
Suite 500, Plano, TX
United States

Telephone: 972-265-0400

Telefax: 972-265-0499

E-mail address: info@viacheminc.com

1.4. Emergency telephone number

24-hour emergency number: 800-424-9300 CHEMTREC (CCN 20412), Outside U.S. 703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to paragraph (d) of 29 CFR 1910.1200:

Not classified.

2.2. Label elements

Labelling according to paragraph (f) of 29 CFR 1910.1200:

Hazard symbol(s): None.

Signal word: None.

Hazard statement(s): None.

Precautionary statement(s): None.

2.3. Other hazards

Spills produce extremely slippery surfaces.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable, this product is a mixture.

3.2. Mixtures

This product is a mixture.

Hazardous components

Contains no reportable hazardous substances.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air. No hazards which require special first aid measures.

Skin contact:

Wash off with plenty of water. Get medical attention if irritation develops and persists.

Eye contact:

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion:

If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

None under normal use.

4.3. Indication of any immediate medical attention and special treatment needed.

None reasonably foreseeable.

Other information:

None.

SECTION 5: Fire-fighting measures

SECTION 5: Fire-fighting measures**5.1. Extinguishing media**

Suitable extinguishing media:

Water. Water spray. Foam. Carbon dioxide (CO₂). Dry powder.
Warning! Spills produce extremely slippery surfaces.

Unsuitable extinguishing media:

None known.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products:

Thermal decomposition may produce: carbon oxides (CO_x).

5.3. Advice for fire-fighters

Protective measures:

No special protective measures against fire required. Wear self contained breathing apparatus for fire fighting if necessary.

Other information:

Will not burn until water is evaporated. Spills produce extremely slippery surfaces.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions:

No special precautions required. Spills produce extremely slippery surfaces.

Protective equipment:

Wear adequate personal protective equipment (see Section 8 Exposure Controls/Personal Protection).

Emergency procedures:

Prevent further leakage or spillage if safe to do so. Keep people away from spill/leak.

6.2. Environmental precautions

As with all chemical products, do not flush into surface water.

6.3. Methods and material for containment and cleaning up

Small spills:

Do not flush with water. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

Large spills:

Do not flush with water. Dam up. Clean up promptly by scoop or vacuum.

Residues:

After cleaning, flush away traces with water.

6.4. Reference to other sections

SECTION 7: Handling and storage; SECTION 8: Exposure controls/personal protection; SECTION 13: Disposal considerations;

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Renders surfaces extremely slippery when spilled.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Freezing will affect the physical condition and may damage the material.

7.3. Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Occupational exposure limits:

None known.

8.2. Exposure controls

Appropriate engineering controls:

Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

Individual protection measures, such as personal protective equipment:

a) *Eye/face protection:*

Safety glasses with side-shields.

b) *Skin protection:*

i) *Hand protection:* Impervious gloves.

ii) *Other:* Chemical resistant apron or protective suit if splashing or repeated contact with solution is likely.

c) *Respiratory protection:*

Not required ; except in case of aerosol formation.

d) *Additional advice:*

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls:

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

a) Appearance:	Clear to slightly yellow liquid.
b) Odour:	Slight.
c) Odour Threshold:	No data available.
d) pH:	2 - 5
e) Melting point/freezing point:	< 0°C
f) Initial boiling point and boiling range:	100°C
g) Flash point:	Does not flash.
h) Evaporation rate:	Same as water.
i) Flammability (solid, gas):	Not applicable.
j) Upper/lower flammability or explosive limits:	Not expected to create explosive atmospheres.
k) Vapour pressure:	2.3 kPa @ 20°C
l) Vapour density:	Equivalent to water (~0.8 g/l).
m) Relative density:	1.0 - 1.4
n) Solubility(ies):	Completely miscible in water.
o) Partition coefficient:	~0
p) Autoignition temperature:	Does not self-ignite (based on the chemical structure).
q) Decomposition temperature:	> 100°C
r) Viscosity:	See Technical Bulletin.
s) Explosive properties:	Not expected to be explosive based on the chemical structure.
t) Oxidizing properties:	Not expected to be oxidising based on the chemical structure.

9.2. Other information

None.

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Protect from frost, heat and sunlight.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Thermal decomposition may produce: carbon oxides (CO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on the product as supplied:

Acute oral toxicity:	LD50/oral/rat > 5000 mg/kg. (Estimated)
Acute dermal toxicity:	LD50/dermal/rat > 5000 mg/kg. (Estimated)
Acute inhalation toxicity:	Testing by the inhalation route is inappropriate because exposure of humans via inhalation is unlikely: the substance has no vapour pressure and there is practically no exposure to inhalable aerosols.
Skin corrosion/irritation:	By analogy with similar products, this product is not expected to be irritating.
Serious eye damage/eye irritation:	By analogy with similar products, this product is not expected to be irritating.
Respiratory/skin sensitisation:	By analogy with similar products, this product is not expected to be sensitizing.
Mutagenicity:	By analogy with similar products, this product is not expected to be mutagenic.
Carcinogenicity:	By analogy with similar substances, this substance is not expected to be carcinogenic.
Reproductive toxicity:	By analogy with similar substances, this substance is not expected to be toxic for reproduction.
STOT - Single exposure:	No known effects.
STOT - Repeated exposure:	No known effect.
Aspiration hazard:	No hazards resulting from the material as supplied.

SECTION 12: Ecological information

12.1. Toxicity

Information on the product as supplied:

Acute toxicity to fish: LC50/Oncorhynchus mykiss/96 hours > 100 mg/L. (Estimated)

<i>Acute toxicity to invertebrates:</i>	EC50/Daphnia magna/48 hours > 100 mg/L. (Estimated)
<i>Acute toxicity to algae:</i>	IC50/Algae/72 hours > 100 mg/L (Estimated)
<i>Chronic toxicity to fish:</i>	No data available.
<i>Chronic toxicity to invertebrates:</i>	No data available.
<i>Toxicity to microorganisms:</i>	No data available.
<i>Effects on terrestrial organisms:</i>	No data available.
<i>Sediment toxicity:</i>	No data available.

12.2. Persistence and degradability

Information on the product as supplied:

<i>Degradation:</i>	Not readily biodegradable.
<i>Hydrolysis:</i>	Does not hydrolyse.
<i>Photolysis:</i>	No data available.

12.3. Bioaccumulative potential

Information on the product as supplied:

The product is not expected to bioaccumulate.

<i>Partition co-efficient (Log Pow):</i>	~0
<i>Bioconcentration factor (BCF):</i>	No data available.

12.4. Mobility in soil

Information on the product as supplied:

No data available.

12.5. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products:

Dispose in accordance with local and national regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Contaminated packaging:

Rinse empty containers with water and use the rinse-water to prepare the working solution. If recycling is not practicable, dispose of in compliance with local regulations.

Recycling:

In accordance with local and national regulations.

SECTION 14: Transport information***Land transport (DOT)***

Not classified.

Sea transport (IMDG)

Not classified.

Air transport (IATA)

Not classified.

SECTION 15: Regulatory information***15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture***Information on the product as supplied:TSCA Chemical Substances Inventory:

All components of this product are either listed on the inventory or are exempt from listing.

US SARA Reporting Requirements:

SARA (Section 311/312) hazard class:
Not concerned.

SARA Title III Sections:

Section 302 (TPQ) - Reportable Quantity:
Not concerned.

Section 304 - Reportable Quantity:
Not concerned.

Section 313 (De minimis concentration):
Not concerned.

Clean Water Act

Section 311 Hazardous Substances (40 CFR 117.3) - Reportable Quantity:
Not concerned.

Clean Air Act

Section 112(r) Accidental release prevention requirements (40 CFR 68) - Reportable Quantity:
Not concerned.

CERCLA

Hazardous Substances List (40 CFR 302.4) - Reportable Quantity:
Not concerned.

RCRA status :

Not RCRA hazardous.

California Proposition 65 Information:

Not concerned.

SECTION 16: Other informationNFPA and HMIS Ratings:

NFPA:

Health:	0
Flammability:	0
Instability:	0



HMIS:

Health:	0
Flammability:	0
Physical Hazard:	0
PPE Code:	B

This data sheet contains changes from the previous version in section(s):

SECTION 5. Fire-fighting measures, SECTION 8. Exposure controls/personal protection, SECTION 15. Regulatory information, SECTION 16. Other Information.

Key or legend to abbreviations and acronyms used in the safety data sheet:

Acronyms

STOT = Specific target organ toxicity

Training advice:

Do not handle until all safety precautions have been read and understood.

This SDS was prepared in accordance with the following:

U.S. Code of Federal Regulations 29 CFR 1910.1200

Version: 17.01.a

LDAC003C

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.