SAFETY DATA SHEET
100%
CETYL ALCOHOL

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. PRODUCT IDENTIFIER

Product name:	Cetyl Alcohol
Product No.:	CET
CAS-No.:	36653-82-4
EC No.:	253-149-0
REACH No.:	01-2119485905-24
Synonym:	Hexadecan-1-ol, Cetanol, Ethal, Ethol, Hexadecanol, Hexadecyl alcohol, Palmityl alcohol
Chemical Formula:	$C_{16}H_34O$

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Recommended use: In the cosmetic industry as an opacifier in shampoos, or as an emollient, emulsifier or thickening agent in the manufacture of skin creams and lotions, for viscosity control in cosmetic oil/water emulsions;

As a lubricant for nuts and bolts;

Is the active ingredient in some "liquid pool covers" (forming a surface layer to reduce evaporation and retain heat).

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

HD Chemicals LTD
UNIT 9 Scott Business Park
PL2 2PB Plymouth UK

Contact Person responsible for SDS: Mr Peter Konefal, e-mail: contact@hdchemicals.co.uk

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification 67/548/EEC: Not classified

Classification – EC 1272/2008: Skin Corrosion/irritation; Category 2 (H315)

Serious Eye Damage/Irritation; Category 2A (H319)

Aquatic Chronic; Category 4 (H413)

2.2. LABEL ELEMENTS



SIGNAL WORDS

Warning

RISK PHRASES

Not classified

HAZARD PHRASES

H315	Causes skin irritation
H319	Causes serious eye irritation
H413	May cause long-lasting harmful effects to aquatic life

PROTECTION PHRASES

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

SAFETY PHRASES

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

67/548/EEC/1999/45/EC

Composition information – main constituents						
Substance name	**Mol. Formula**	**REACH**	**Typical conc. (%w/w)**	**EINECS No.**	**CAS-No.**	**Classification**
Cetyl Alcohol	$C_{16}H_34O$	01-2119485905-24	100%	253-149-0	36653-82-4	Not classified

EC 1272/2008

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Cetyl Alcohol	$C_{16}H_34O$	01-2119485905-24	100%	253-149-0	36653-82-4	H315, H319, H413

SECTION 4: FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

First-aid measures general: Consult a physician when you fell unwell. Show this safety data sheet to the doctor in attendance.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.

Ingestion: Rinse out mouth and then drink plenty of water. Do not induce vomiting. Seek medical attention.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact: Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Obtain emergency medical attention.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Inhalation: Harmful if inhalation. There may be shortness of breath with a burning sensation in the throat.

Ingestion: Harmful if swallowed. May cause headache, nausea, shortness of breath.

Skin contact: Repeated or prolonged skin contact may cause dermatitis.

Eye contact: Irritating to eyes.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO_2), dry chemical, foam.

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

In case of fire, toxic fumes or vapours may be formed of the following substances: carbon dioxide (CO_2), carbon monoxide (CO). Finely dispersed particles form explosive mixtures in air. Reacts with oxidising compounds and reducing agents.

5.3. ADVICE FOR FIRE-FIGHTERS

Wear protective clothing to prevent contact with skin and eyes. Wear self-contained respiratory protective device if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Wear suitable protective equipment. Splash goggles, protective suit, boots and gloves to prevent any contamination of skin, eyes and personal clothing. Select appropriate protective clothing for the size of the spillage. Ensure adequate ventilation of the working area. Avoid contact with skin and eyes. Avoid formation of dust. Do not breathe dust.

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter sewers/ surface or ground water. Do not allow to enter into soil/subsoil. Prevent further leakage or spillage if safe to do so. Use appropriate container to avoid environmental contamination.

6.3. Methods and material for containment and cleaning up

Vacuum with an equipment that avoids ignition risk. Provide the tank with earthing. Avoid dust formation. Collect and place in suitable waste disposal containers and seal securely. Ensure adequate ventilation.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid formation of dust. Do not inhale dust/smoke/mist. Ensure adequate ventilation of the working area. Do not handle in a confined space. Wear personal protective equipment. Avoid contact with eyes and skin. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products. Keep away from sources of ignition - no smoking. Use only explosion-proof equipment.

For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a cool, dry, well ventilated area. Store only in the original, tightly closed containers. Avoid sources of heat, sparks and open flame. Do not smoke when use this product. Avoid humid air.

7.3. Specific end use(s)

See section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters/Exposure guidelines

Occupational Exposure Limit Values (Cetyl Alcohol):

CAS NO	Exposure limit	Value	Name of Agent
36653-82-4	TWA – 8 Hrs	10 mg/m^3	inhalable particles

36653-82-4	STEL – 15 Min	15 mg/m^3	total dust

Engineering controls: Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands before breaks and at the end of the working day. Keep away from foodstuffs, beverages and feed.


EYE PROTECTION


FACE SHIELD


RESPIRATOR


PROTECTION WEAR


HAND PROTECTION

Protective equipment: Use protective goggles (European standard - EN 166), gloves (European standard - EN 374) and protective clothes to prevent skin, body and eyes exposure.

Respiratory equipment: Where exposure through inhalation may occur from use, approved respiratory protection equipment is recommended. Particulate filter device (EN 143). Filter type P1.

Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye/Face protection: Wear appropriate tightly fitting safety goggles or chemical safety goggles as described by EN166 (EU Standard). Ensure eye bath is to hand.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Solid
Colour:	White
Odour:	Odourless
Initial boiling point (°C):	No data available
Melting point (°C):	49.3 °C
Freezing point:	No data available
Relative density:	0.811 g/cm^3
Specific gravity / density:	Not available
Vapour density:	Not available
Vapour pressure:	Not available
Flash point (°C):	Not available
Molecular mass:	242.447 g/mol
Auto-ignition temperature:	Not applicable
Oxidizing properties:	Not available
Decomposition temperature:	Not available
Molecular formula:	$C_{16}H_34O$

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

Reacts with oxidising compounds and reducing agents.

10.2. CHEMICAL STABILITY

Cetyl Alcohol is stable under normal temperature conditions and under recommended usage and storage.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

Finely dispersed particles form explosive mixtures in air.

10.4. CONDITIONS TO AVOID

Avoid sources of heat, sparks and open flame. Do not smoke when use this product. Avoid humid air.

10.5. INCOMPATIBLE MATERIALS

Strong oxidizing agents, strong acids.

10.6. HAZARDOUS DECOMPOSITION

In case of fire, toxic fumes or vapours may be formed of the following substances: carbon dioxide (CO_2), carbon monoxide (CO). Finely dispersed particles form explosive mixtures in air. Reacts with oxidising compounds and reducing agents.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

TOXIC DOSE	**LD50 Oral – Rat – > 5000 mg/kg**
	LD50 Dermal – Rabbit – > 2600 mg/kg
Inhalation:	Harmful if inhalation. There may be shortness of breath with a burning sensation in the throat.
Ingestion:	Harmful if swallowed. May cause headache, nausea, shortness of breath.
Skin contact:	Repeated or prolonged skin contact may cause dermatitis.
Eye contact:	Irritating to eyes.

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Aquatic Toxicity:

Toxicity to freshwater fish:	LC50: 0,4 mg/l, 96h (Oncorhynchus mykiss)
Toxicity to algae:	EC50: > 1.000 mg/l, 96h (Desmodesmus subspicatus)

12.2. PERSISTENCE AND DEGRADABILITY

Readily biodegradable.

12.3. BIOACCUMULATIVE POTENTIAL

No data available.

12.4. MOBILITY

Cetyl Alcohol is insoluble in water.

12.5. RESULTS OF PBT AND VPVB ASSESSMENT

This product does not contain any substances classified as PBT or vPvB.

12.6. OTHER ADVERSE EFFECTS

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal recommendations: Disposal of cetyl alcohol should be in accordance with local and national legislation. Processing, use or contamination of this product may change the waste management options. Should not be released into the environment. Empty containers should be taken for local recycling, recovery or waste disposal. Collect all waste in suitable and labelled containers and disposal according to local legislation.

Uncleaned packaging: Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

IMDG

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

ADR/RID

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

IATA

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

SECTION 15: REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

National regulations: The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2 CHEMICAL SAFETY ASSESSMENT

Chemical safety Assessment has been carried out for this substance.

SECTION 16: OTHER INFORMATION

General information

The information contained in this safety data sheet is provided in accordance with the requirements of the regulations. The product should not be used for purposes other than those shown in section 1 without first referring to the supplier and obtaining written handling instruction. As the specific conditions of use of the product are outside the suppliers control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

Revision Comments

This information is provided in a revised format to that previously produced.

Revision Date: 01/10/2018

Revision: 01

Safety Data Sheet Status Approved.

Date printed 01/10/2018

Signature Initials P.K.

DISCLAIMER:

If this product is re-distributed and re-formulated for sale, details of its hazards and recommended methods for safe handling must be passed to customers. Customers are urged to ensure that the

product is entirely suitable for their own purpose. It is the customer's responsibility to ensure that a suitable and sufficient assessment of the risks created by a work activity using this product is undertaken before this product is used.

NOTE:

The information contained in this Safety Data Sheet does not constitute the users own assessment of workplace risk as required by other Health & Safety Legislation (e.g. the Health and Safety at Work Act,1974;the control of Substances Hazardous to Health Regulations,1988). The data given here is based on current knowledge and experience. The purpose of this data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.