Safety Data Sheet

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

1.1 Product identifier

Capella HFC 32, 100

Product Number(s): 219404, 219405, 830248, 836315

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

Identified Uses: Refrigeration Oil

Uses advised against: Consult supplier when used other than those specified.

1.3 Details of the supplier of the safety data sheet

Uno-X Smøreolje AS Gladengveien 2 NO-0661 Oslo Norway

www.olje.unox.no email : olje@unox.no

1.4 Emergency telephone number

Transportation Emergency Response

CHEMTREC: +1 703 527 3887

Health Emergency

Chevron Emergency Information Center: International calls accepted 24 hours: +1 510 231 0623

Poison Control Centre Norway: 0047/22591300

Product Information

Technical Information: (+47)04210

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLP CLASSIFICATION:

Not classified as dangerous according to EU regulatory guidelines.

2.2 Label elements

Under the criteria of Regulation (EC) No 1272/2008 (CLP):

Not classified

2.3 Other hazards

This material does not contain a substance considered to have endocrine disrupting properties at levels of 0.1% weight or higher. This material does not contain a substance considered to be PBT or vPvB at levels of 0.1% weight or higher.

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

3.2 Mixtures

This material is a mixture.

In accordance with the Regulation (EC)No 1272/2008, Nota L, reference IP 346/92: "DMSO Extraction Method", we have determined that the base oils used in this preparation contain <3% DMSO extract and

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are not carcinogenic.

This material contains no ingredients requiring disclosure under the regulatory criteria for this jurisdiction.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

4.2 Most important symptoms and effects, both acute and delayed IMMEDIATE SYMPTOMS AND HEALTH EFFECTS

Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Contact with the skin is not expected to be harmful.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Contains a synthetic hydrocarbon oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

DELAYED OR OTHER SYMPTOMS AND HEALTH EFFECTS: Not classified.

4.3 Indication of any immediate medical attention and special treatment needed Not applicable.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

5.2 Special hazards arising from the substance or mixture

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

5.3 Advice for firefighters

This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Observe all relevant local and international regulations. Eliminate all sources of ignition in vicinity of spilled material. Keep out unnecessary and unprotected personnel. Persons entering the contaminated area to correct the problem or to determine whether it is safe to resume normal activities must comply with all instructions in the Exposure Controls/PersonalProtection section. Refer to Sections 5 and 8 for more information.

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6.2 Environmental precautions

Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater.

6.3 Methods and material for containment and cleaning up

Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil and dispose of in a manner consistent with applicable requirements. Place other contaminated materials in disposable containers and dispose of in a manner consistent with applicable requirements. Report spills to local authorities as appropriate or required.

6.4 Reference to other sections

See sections 8 and 13.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Precautionary Measures: Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

7.2 Conditions for safe storage, including any incompatibilities

Not Applicable

7.3 Specific end use(s):Refrigeration Oil

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the workplace when designing engineering controls and selecting personal protective equipment (PPE). If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, refer to PPE information below.

Factors that affect PPE include, but are not limited to: properties of the chemical, other chemicals which may contact the same PPE, physical requirements (fit & sizing, cut/puncture protection, dexterity, thermal protection, etc.), and potential allergic reactions to the PPE material. It is the responsibility of the user to read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances. Refer to appropriate CEN standards.

8.1 Control parameters

Occupational Exposure Limits: No applicable occupational exposure limits exist for this material or its

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components. Consult local authorities for appropriate values.

8.2 Exposure controls ENGINEERING CONTROLS:

Use in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: Wear protective equipment to prevent eye contact. Selection of protective equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work operations conducted.

Skin Protection: Wear chemical personal protective equipment (PPE) to prevent skin contact. Selection of chemical protective clothing should be performed by an Occupational Hygienist or Safety Professional and be based upon applicable standards (ASTM F739 or EN 374). Using chemical PPE depends upon operations conducted and may include chemical gloves, boots, chemical apron, chemical suit, and complete facial protection. **Refer to PPE manufacturers to obtain breakthrough time information to determine how long PPE can be used before it needs to be replaced.** Unless specific glove manufacturer data indicates otherwise, the below table is based upon available industry data to assist in the glove selection process and is intended to be used as reference only.

Chemical Glove Material	Thickness (mm)	Typical Breakthrough Time (minutes)
Butyl	0.7	120
Nitrile	0.8	240
Viton Butyl	0.3	240

Respiratory Protection: A site-specific risk assessment should be conducted by an Occupational Hygienist or a Safety Professional to determine the type and use of respiratory protective equipment. When a site-specific risk assessment determines that respiratory protection is required, use an approved respirator such as:

Air purifying respirator -

If an oil mist is generated (dependent upon job activity): use both an organic vapor cartridge & particulate filter (AP3 filter per EN 529:2005).

Refer to respirator manufacturers to obtain service life of cartridge / filter.

Refer to EN 529:2005, USA OSHA 1910.134, and/or other applicable local/regional/national/international standards for regulatory requirements.

ENVIRONMENTAL EXPOSURE CONTROLS:

See relevant Community environmental protection legislation or the Annex, as applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

9.1 Information on basic physical and chemical properties

Appearance

Color: Brown to yellow Physical State: Liquid Odor: Petroleum odor

Odor Threshold: No data available

pH: Not Applicable

Melting Point: No data available **Freezing Point:** Not Applicable

Initial Boiling Point: No data available

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Flashpoint: (Cleveland Open Cup) 240 °C (464 °F) (Minimum)

Evaporation Rate: No data available **Flammability (solid, gas):** Not Applicable

Flammability (Explosive) Limits (% by volume in air):

Lower: Not Applicable Upper: Not Applicable

Vapor Pressure: No data available
Relative Vapor Density: No data available
Density: 0.9650 kg/l - 1.010 kg/l @ 15°C (59°F)
Solubility: Soluble in hydrocarbons; insoluble in water

Partition coefficient n-octanol/water (logarithmic value): No data available

Auto-ignition temperature: No data available **Decomposition temperature:** No data available

Kinematic Viscosity: 32 mm2/s - 100 mm2/s @ 40°C (104°F) (Typical)

Explosive Properties: No Data Available **Oxidising properties:** No Data Available

9.2 Other Information: No Data Available

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

10.2 Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions: Hazardous polymerization will not occur.

10.4 Conditions to Avoid: Not applicable

10.5 Incompatible materials to avoid: Not applicable

10.6 Hazardous decomposition products: None known (None expected)

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Serious Eye Damage/Irritation: The material is not considered an eye irritant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Skin Corrosion/Irritation: The material is not considered a skin irritant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Skin Sensitization: The material is not considered a skin sensitizer. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Dermal Toxicity: The material is not considered a dermal toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Toxicity Estimate (dermal): Not Applicable

Acute Oral Toxicity: The material is not considered an oral toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Toxicity Estimate (oral): Not Applicable

Acute Inhalation Toxicity: The material is not considered an inhalation toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Toxicity Estimate (inhalation): Not Applicable

Germ Cell Mutagenicity: The material is not considered a mutagen. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

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Carcinogenicity: The material is not considered a carcinogen. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Reproductive Toxicity: The material is not considered a reproductive toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Specific Target Organ Toxicity - Single Exposure: The material is not considered a target organ toxicant (single exposure). The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Specific Target Organ Toxicity - Repeated Exposure: The material is not considered a target organ toxicant (repeated exposure). The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Aspiration Hazard: The material is not considered an aspiration hazard.

11.2 Information on other hazards

No other hazards identified.

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity

This material is not expected to be harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

12.2 Persistence and degradability

This material is not expected to be readily biodegradable. The product has not been tested. The statement has been derived from the properties of the individual components.

12.3 Bioaccumulative potential

Bioconcentration Factor: No Data Available

Partition coefficient n-octanol/water (logarithmic value): No data available

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This material does not meet the criteria for PBT or vPvB.

12.6 Endocrine Disrupting Properties

This mixture does not contain any substances that are assessed as having endocrine disrupting properties.

12.7 Other adverse effects

No other adverse effects identified.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

In accordance with European Waste Catalogue (E.W.C.) the codification is the following:13 02 08

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SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult appropriate Dangerous Goods Regulations for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

ADR/RID

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

14.1 UN Number or ID Number: Not applicable 14.2 UN proper shipping name: Not applicable 14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable **14.6 Special precautions for user:** Not applicable

ICAO / IATA

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

14.1 UN Number or ID Number: Not applicable 14.2 UN proper shipping name: Not applicable 14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable14.6 Special precautions for user: Not applicable

IMO / IMDG

NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

14.1 UN Number or ID Number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable

14.7 Maritime Transport in Bulk according to IMO Instruments: Not applicable

SECTION 15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture REGULATORY LISTS SEARCHED:

01=EU Directive 92/85/EEC: Pregnant or breastfeeding workers.

02=EU Directive 2012/18/EU: Seveso III.

03=EU Directive 98/24/EC: Chemical agents at work.

04=EU Directive 2004/37/EC: On the protection of workers.

05=EU Regulation EC No. 689/2008: Annex 1, Part 1.

06=EU Regulation EC No. 850/2004: Prohibiting and restricting persistent organic pollutants (POPs).

07=EU REACH, Annex XVII: Restrictions on manufacture, placing on the market and use of certain dangerous substances, mixture & article.

08=EU REACH, Annex XIV: Authorization List or Candidate List of Substances of Very High Concern for Authorization (SVHC).

No components of this material were found on the regulatory lists above.

Other Regulations:

FOR 2004-06-01 nr 930: Regulation on the Recycling and Treatment of Waste (Waste Regulation), with

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subsequent amendments

CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: AIIC (Australia), DSL (Canada), EINECS (European Union), ENCS (Japan), IECSC (China), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (United States).

15.2 Chemical safety assessment

No chemical safety assessment.

SECTION 16 OTHER INFORMATION

REVISION STATEMENT: SECTION 01 - Product Use information was added.

SECTION 02 - Supplemental Hazard information was modified.

SECTION 03 - Ingredient Comment information was modified.

SECTION 06 - Personal Precautions, Protective Equipment and Emergency Procedures information was modified.

SECTION 08 - Respiratory Protection information was added.

SECTION 08 - Respiratory Protection information was modified.

SECTION 09 - Physical/Chemical Properties information was modified.

SECTION 12 - Ecological Information information was modified.

SECTION 15 - Regulatory Information information was added.

SECTION 15 - Regulatory Information information was modified.

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Full text of CLP H-statements:

None

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
CVX - Chevron	CAS - Chemical Abstract Service Number
NQ - Not Quantifiable	

Prepared according to the EU Regulation 1907/2006 with its amendment Regulation (EU) 2020/878 by Chevron.

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No Annex

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