



SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER

Product Name : Acetoxy Silicone Dispersion

Product Code : TS-564

Intended Use(s) : Silicone Coating and sealant CONTACT INFORMATION FOR

SUPPLIER OF SAFETY DATA SHEET

Factor II, Incorporated PO Box 1339
5642 White Mountain Ave Lakeside AZ 85929
928-537-8387
800-332-8688
www.factor2.com
sales@factor2.com

EMERGENCY TELEPHONE NUMBERS

Factor II, Incorporated
Americas : 1 928 537 8387
Europe : (+) 1 928 537 8387
Asia Pacific : (+) 1 928 537 8387
Middle East / Africa : (+) 1 928 537 8387
Australia : (+) 1 928 537 8387
China : (+) 1 928 537 8387

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Classification

Hazard class : Flammable liquid, Category 2 Skin
irritation, Category 2 Eye irritation,
Category 2A
Reproductive toxicity, Category 2 STOT-single
exposure, Category 3 Aspiration hazard,
Category 1 Acute aquatic toxicity, Category 1

Hazard Pictogram(s) :





Signal word : Danger

Hazard statement(s) : H225 Highly flammable liquid and vapor
H304 May be fatal if swallowed and enters airways
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness
H361 Suspected of damaging fertility or the unborn child
H371 May cause damage to organs (vasculature)
H400 Very toxic to aquatic life

Precautionary statement(s) : **Prevention**
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P210 Keep away from heat/sparks/open flame/hot surfaces.
No smoking.
P233 Keep container tightly closed
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/lighting equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge P260
Do not breathe dust/fumes/gas/mist/vapor/spray
P264 Wash skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product P271 Use
only outdoors or in a well-ventilated area P273 Avoid release to
the environment
P280 Wear protective gloves/ protective clothing/ eye
protection/ face protection.

Response
P301 + P310: IF SWALLOWED: Immediately call a POISON
CENTER /doctor.
P303 + P361 + P353: IF ON SKIN (or hair): Take off
immediately all contaminated clothing. Rinse skin with
water/shower.
P304 + P340: IF INHALED: Remove person to fresh air and
keep comfortable for breathing.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with
water for several minutes. Remove contact lenses, if present
and easy to do. Continue rinsing. Get immediate medical
advice/attention.
P308 + P311: IF exposed or concerned: Call a POISON
CENTER/doctor.
P308 + P313: IF exposed or concerned: Get medical advice/
attention.
P331: Do NOT induce vomiting.
P332 + P313: If skin irritation occurs: Get medical advice/
attention.
P337 + P313: If eye irritation persists: Get medical advice/
attention.



P362 + P364: Take off contaminated clothing and wash it before reuse.

P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P391: Collect spillage

Storage

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P403 + P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration
Cyclohexane (C6H12)	110-82-7	70-80% by weight
Polyorganosiloxanes	Proprietary	30-20% by weight

SECTION 4: FIRST-AID MEASURES

General advice :

Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.

If inhaled : Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.

In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Flush eyes with water as a precaution.

If swallowed : Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION 5: FIRE-FIGHTING MEASURES

Flash point : -18.3 °C (-0.9 °F)
Method: closed cup
Autoignition temperature : 260 °C (500 °F)
Suitable extinguishing media: Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.



Unsuitable extinguishing media :	High volume water jet.
Specific hazards during fire fighting :	Do not allow run-off from fire fighting to enter drains or water courses.
Special protective equipment for fire-fighters :	Wear self-contained breathing apparatus for firefighting if necessary.
Further information :	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Fire and explosion protection :	Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.
Hazardous decomposition products :	Carbon Dioxide. Carbon oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions and emergency procedures :

Use personal protective equipment. Ensure adequate ventilation. remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleanup procedures :

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).



SECTION 7: HANDLING AND STORAGE

Handling

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. 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 to generating and accumulation of 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. For more information, refer to OSHA Standard 29 CFR 1910.106 "Flammable and Combustible Liquids"; National Fire Protection Association (NFPA 77), "Recommended Practice on Static Electricity"; and/or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and stray Currents".

Advice on protection against fire and explosion:

Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers

No smoking. Keep container tightly closed in a dry and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	Basis	Value	Control parameters	Note
Cyclohexane	JP OEL JSOH	OEL-M	15 ppm. 520 mg/m3	

Personal protective equipment

Respiratory protection :

Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.



Hand protection :

The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection :

Eye wash bottle with pure water. Tightly fitting safety goggles.

Skin and body protection :

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate:. Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.

Hygiene measures :

When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Physical state : Liquid
Color : Colorless
Odor : chlorform-like,irritating

Safety data

Flash point : -18.3 °C (-0.9 °F)
Method: closed cup
Lower explosion limit : 1.3 %(V)
Upper explosion limit : 8 %(V)
Oxidizing properties : no

Autoignition temperature : 260 °C (500 °F)
Molecular weight : 84.18 g/mol
pH : Not applicable
Pour point : No data available

Melting point/range 6.59 °C (43.86 °F)
Boiling point/boiling range : 80.7 °C (177.3 °F)
Vapor pressure : 3.26 PSI at 37.8 °C (100.0 °F)
Relative density : 0.78 at 15.6 °C (60.1 °F)



Density : 0.8 g/cm³
Water solubility : Soluble in hydrocarbon solvents, natural oils, fats, and waxes;
Insoluble in water.

Partition coefficient:
noctanol/water: No data available
Viscosity, kinematic : 0.953 cSt at 37.8 °C (100.0 °F)
Relative vapor density : 2.9 (Air = 1.0)
Evaporation rate : 1.95
Percent volatile : > 99 %

Other information

Conductivity : < 5 pSm

SECTION 10: STABILITY AND REACTIVITY

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

Possibility of hazardous reactions

Conditions to avoid : Heat, flames and sparks.

Materials to avoid : May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc. Oxidizing solids. Oxidizing liquids.

Hazardous decomposition products: Carbon Dioxide Carbon oxides

Other data : No decomposition if stored and applied as directed.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute oral toxicity
Cyclohexane : LD50: > 5,000 mg/kg
Species: Rat
Sex: male and female
Method: OECD Test Guideline 401

Acute inhalation toxicity
Cyclohexane : LC50: >32,880 mg/m³Exposure time: 4 h
Species: Rat
Sex: male and female
Test atmosphere: vapor
Method: OECD Test Guideline 403



Cyclohexane

Skin irritation :

May cause skin irritation in susceptible persons.

Cyclohexane

Eye irritation :

No adverse effects expected. Vapors may cause irritation to the eyes, respiratory system and the skin.

Sensitization

Cyclohexane :

Did not cause sensitization on laboratory animals.

Repeated dose toxicity

Cyclohexane :

Species: Rat
Application Route: Inhalation
Dose: 0, 500, 2000, 7000 ppm
Exposure time: 90 day
Number of exposures: 6 h/d, 5 d/wk
NOEL: 2000 ppm
Species: Rat, Male and female
Sex: Male and female
Application Route: Inhalation
Dose: 0, 500, 2,000, 7000 ppm
Exposure time: 13-14 wk
Number of exposures: 6 hr/d, 5 d/wk
NOEL: 7000 ppm
Species: Mouse, Male and female
Sex: Male and female
Application Route: Inhalation
Dose: 0, 500, 2000, 7000 ppm
Exposure time: 13-14 wk
Number of exposures: 6 hr/d, 5 d/wk
NOEL: 2000 ppm
Target Organs: Blood

Reproductive toxicity

Cyclohexane :

Species: Rat
Application Route: Inhalation
Dose: 0, 500, 2000, 7000 ppm
Number of exposures: 6 hr/d, 5 d/wk
Method: OECD Test Guideline 416
NOAEL Parent: 500 ppm
NOAEL F1: 7000 ppm
NOAEL F2: 7000 ppm

Developmental Toxicity

Cyclohexane :

Species: Rat
Application Route: Inhalation
Dose: 0, 500, 2,000, 7,000 PPM
Number of exposures: 6 hr/d
Test period: GD 6-15
Method: OECD Guideline 414



NOAEL Teratogenicity: 7,000 ppm
NOAEL Maternal: 500 ppm
Species: Rabbit
Application Route: Inhalation
Dose: 0, 500, 2,000, 7,000 PPM
Number of exposures: 6 hr/d
Test period: GD 6-18
Method: OECD Guideline 414
NOAEL Teratogenicity: 7,000 ppm
NOAEL Maternal: 500 ppm

Cyclohexane
Aspiration toxicity :

May be fatal if swallowed and enters airways.
Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.

CMR effects
Cyclohexane :

Carcinogenicity: Not classifiable as a human carcinogen.
Mutagenicity: Did not show mutagenic effects in animal experiments.
Teratogenicity: Did not show teratogenic effects in animal experiments.
Reproductive toxicity: No toxicity to reproduction

Cyclohexane
Further information :

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish
Cyclohexane :

LC50: 4.53 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates

Cyclohexane :

EC50: 0.9 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 202

Toxicity to algae

Cyclohexane :

EbC50: 3.4 mg/l
Exposure time: 72 h
Species: Selenastrum capricornutum (algae)



NOEC: 0.925 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (microalgae)
Method: OECD Test Guideline 201

**M-Factor
cyclohexane :** 1

Bioaccumulation

Cyclohexane : Bioconcentration factor (BCF): 167
This material is not expected to bioaccumulate.

Biodegradability

Cyclohexane : 77 %
Testing period: 28 d
Method: OECD Test Guideline 301
This material is expected to be readily biodegradable.

Ecotoxicology Assessment

Acute aquatic toxicity

Cyclohexane : Very toxic to aquatic life.

Chronic aquatic toxicity

Cyclohexane : Very toxic to aquatic life with long lasting effects.

Results of PBT assessment

Cyclohexane : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

The information in this SDS pertains only to the product as shipped. Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.



- Product : This product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container.
- Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: TRANSPORT INFORMATION

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).
Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

UN1145, CYCLOHEXANE, 3, II, RQ (CYCLOHEXANE)

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN1145, CYCLOHEXANE, 3, II, (-18.3 °C), MARINE POLLUTANT, (CYCLOHEXANE)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN1145, CYCLOHEXANE, 3, II

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))

UN1145, CYCLOHEXANE, 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS, (CYCLOHEXANE)

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

UN1145, CYCLOHEXANE, 3, II, ENVIRONMENTALLY HAZARDOUS, (CYCLOHEXANE)

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)

UN1145, CYCLOHEXANE, 3, II, ENVIRONMENTALLY HAZARDOUS, (CYCLOHEXANE)

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

National legislation

**Poisonous and Deleterious Substances Control Law
: Not applicable**



Industrial Safety and Health Law

**Substances Subject to be
Notified Names Article 57-2
(Enforcement Order Table 9):**

cyclohexane(232)

**Enforcement Order of the
Industrial Safety and Health
Law - Attached table 1
(Dangerous Substances):**

Inflammable Substance

**Harmful Substances Required
Permission for Manufacture:**

Not applicable

**Hazardous Substances
Subject to Labeling
Requirements Article 57
(Enforcement Order Article
18) :**

cyclohexane (232)

**Ordinance on Prevention of
Organic Solvent Poisoning:**

Not applicable

**Ordinance on Prevention of
Lead Poisoning :**

Not applicable

**Harmful Substances
Prohibited from Manufacture:**

Not applicable

**Ordinance on Prevention of
Hazards Due to Specified
Chemical Substances:**

Not applicable

**Ordinance on Prevention of
Tetraalkyl Lead Poisoning:**

Not applicable
Not applicable
Not applicable

**Substances Prevented From
Impairment of Health:**

Not applicable
Listed

Chemical Substance Control Law

Priority Assessment Chemical

Substance : cyclohexane(96)

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof

: Not applicable

Other regulations

Fire Service Law : Flammable liquids
 Type 1 petroleums
 Hazardous rank II

Explosive Control Law : Not relevant

Vessel Safety Law : Flammable liquids (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)

Aviation Law : Flammable liquid (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)

Notification status

Europe REACH : On the inventory, or in compliance with the inventory

United States of America (USA): On the inventory, or in compliance with the inventory

TSCA

Canada DSL : On the inventory, or in compliance with the inventory

Australia AICS : On the inventory, or in compliance with the inventory

New Zealand NZIoC : On the inventory, or in compliance with the inventory

Japan ENCS : On the inventory, or in compliance with the inventory

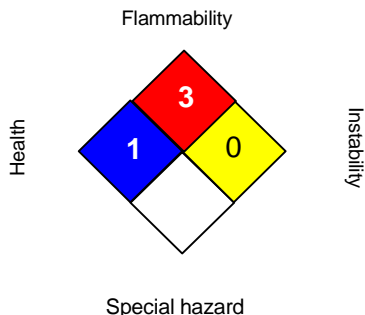
Korea KECI : On the inventory, or in compliance with the inventory

Philippines PICCS : On the inventory, or in compliance with the inventory

China IECSC : On the inventory, or in compliance with the inventory

SECTION 16: OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight, 2 = Moderate,
 3 = High 4 = Extreme, * = Chronic

DISCLAIMER / STATEMENT OF LIABILITY:

Factor II, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should



consider consulting reference works or individuals who are experts in ventilation, toxicology and/or fire prevention as necessary or appropriate to the use and understanding of the data contained in this SDS.

To promote safe handling each customer or recipient should 1) notify and furnish its employees, agents, contractors, customers and/or others whom it knows or believes will use this material of the information regarding hazards or safety, and 2) request its customers to notify their employees, customers and other users of the product of this information.