

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 928 368 7502

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 Hazard statement(s)	:	Danger 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



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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



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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 : Method: Autoignition temperature : Suitable extinguishing media:	-18.3 °C (-0.9 °F) closed cup 260 °C (500 °F) Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical	
Unsuitable extinguishing media :		High volume water jet.
Specific hazards during fire fighting	ng :	Do not allow run-off from fire fighting to enter drains or water courses.

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Special p	protective equipment for fire-fighte	rs :	Wear self-contained breathing apparatus for firefighting if necessary.
Further in	nformation :	Col sep Fire wa reg sho Use	lect contaminated fire extinguishing water parately. This must not be discharged into drains. e residues and contaminated fire extinguishing er must be disposed of in accordance with local ulations. For safety reasons in case of fire, cans ould be stored separately in closed containments. e a water spray to cool fully closed containers.
Fire and	explosion protection :	Do inca avo ign equ sur	not spray on an open flame or any other andescent material. Take necessary action to bid static electricity discharge (which might cause ition of organic vapors). Use only explosion-proof lipment. Keep away from open flames, hot faces and sources of ignition.
Hazardou	us decomposition products :	Ca	bon 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



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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.



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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 : Color : Odor :	Liquid Colorless chlorform-like,irritating
Safety data Flash point : Method: Lower explosion limit : Upper explosion limit : Oxidizing properties :	-18.3 °C (-0.9 °F) closed cup 1.3 %(V) 8 %(V) no
Autoignition temperature : Molecular weight : pH : Pour point :	260 °C (500 °F) 84.18 g/mol Not applicable No data available
Melting point/range Boiling point/boiling range : Vapor pressure : Relative density :	6.59 °C (43.86 °F) 80.7 °C (177.3 °F) 3.26 PSI at 37.8 °C (100.0 °F) 0.78 at 15.6 °C (60.1 °F)
Density : Water solubility :	0.8 g/cm3 Soluble in hydrocarbon solvents, natural oils, fats, and waxes; Insoluble in water.
Partition coefficient: noctanol/water: Viscosity, kinematic : Relative vapor density : Evaporation rate : Percent volatile :	No data available 0.953 cSt at 37.8 °C (100.0 °F) 2.9 (Air = 1.0) 1.95 > 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

No decomposition if stored and applied as directed.

Other data :

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
o yololloxallo l	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	
Eve irritation :	No adverse effects expected. Vapors may cause irritation
_,	to the eves. respiratory system and the skin.
Sensitization	
Cyclohexane :	Did not cause sensitization on laboratory animals.
Popostod doso toxicity	
Cyclobexane :	Species: Rat
Oycionexane .	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
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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 :

Developmental Toxicity Cyclohexane :

Cyclohexane Aspiration toxicity : 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

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

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

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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: ECOLOGICA	LINFORMATION
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 othe	er 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 %



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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)



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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 Substan	nces 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



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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
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

Flammable liquids Type 1 petroleums Hazardous rank II
Not relevant
Flammable liquids (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)
Flammable liquid (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)
On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory
On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory



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SECTION 16: OTHER INFORMATION



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