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 : 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

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)

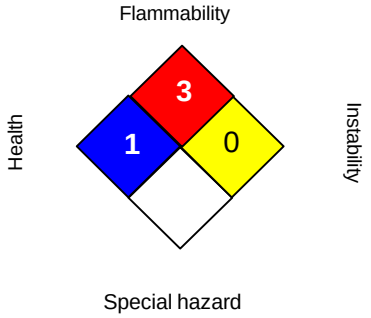
Aviation Law : Flammable liquid (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)

Notification status

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

SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER

Product Name Silicone Elastomer

Product Code A-RTV-4020 C

Intended Use(s) : For professional use only

CONTACT INFORMATION FOR SUPPLIER OF SAFETY DATA SHEET

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

EMERGENCY TELEPHONE NUMBERS

928- 368-7502

SECTION 2: HAZARD IDENTIFICATION

Hazard Classification Not a hazardous substance or mixture according to GHS.

Label Elements

Hazard Symbol No symbol.

Signal Word No signal word.

Hazard Statement Not applicable.

Precautionary Statements

Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.

Other hazards which do not result in GHS classification

Chemical compounds containing silicon - hydrogen bonds (SiH). This product may generate hydrogen gas. For further information, refer to Section 10: "Stability and Reactivity".

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Composition Comments Mixture of Polyorganosiloxanes, fillers.

SECTION 4: FIRST AID MEASURES

General information	For further information refer to section 8 "Exposure-controls/ personal protection".
Ingestion	Do not induce vomiting. Rinse mouth thoroughly. Get medical attention if symptoms occur.
Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin Contact	Wash skin thoroughly with soap and water. Get medical attention if symptoms occur after washing.
Eye contact	In the event of contact with the eyes, rinse thoroughly with clean water for at least 15 minutes. Get medical attention if irritation persists after washing.

Most important symptoms/effects, acute and delayed

Symptoms	None known.
Hazards	No specific recommendations.

Indication of immediate medical attention and special treatment needed

Treatment	No specific recommendations.

SECTION 5: FIRE FIGHTING MEASURES

General Fire Hazards Water spray should be used to cool containers.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media

Dry chemical, alcohol resistant foam or carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire. Do not use alkaline powders.

Specific hazards arising from the chemical

Product will burn under fire conditions. This product may generate hydrogen gas. Vapors may form explosive mixtures with air. For further information, refer to Section 10: "Stability and Reactivity". Hazardous Decomposition Products : formaldehyde, oxides of carbon and silica.

Special protective equipment and precautions for firefighters

Special firefighting procedures

Water spray should be used to cool containers.

Special protective equipment for fire-fighters:

Firefighters should wear standard protective equipment and a positive pressure self-contained breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear appropriate personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Avoid contact with alkalis and caustic products. Eliminate all sources of ignition.

Methods and material for containment and cleaning up

Ventilate the area. Use non-sparking tools. Absorb with sand or other inert absorbent. Avoid contact with bases. Scrape up and place in appropriate vented container.

Notification Procedures

Caution: Contaminated surfaces may be slippery. For waste disposal, see Section 13 of the SDS.

Environmental Precautions

Do not allow to enter drains, sewers or watercourses.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Provide adequate ventilation if fumes or vapors are generated. Do not mix with incompatible materials. For further information, refer to Section 10: "Stability and Reactivity". Read and follow manufacturer's recommendations.

Conditions for safe storage, including any incompatibilities

Store in original vented container. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits: None of the components have assigned exposure limits.

Appropriate Engineering Controls: No special precautions.

Individual protection measures, such as personal protective equipment

General information

Provide sufficient ventilation during operations which cause vapor formation. This product can form formaldehyde vapors when heated to temperatures above 150 degrees C in the presence of air.

Eye/face protection: Wear approved chemical safety glasses.

Skin Protection

Hand Protection: Protective gloves are recommended.

Other: Wear suitable protective clothing.

Respiratory Protection

No protection is ordinarily required under normal conditions of use and with adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided.

Hygiene measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (Based on typical material)

Information on basic physical and chemical properties

Appearance	
Physical state	Liquid
Form	Viscous
Color	Colorless
Odor	Slight odor

Odor threshold	No data available.
pH	Not applicable.
Freezing point	No data available.
Boiling Point	No data available.
Flash Point	> 392 °F (200 °C)
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Flammability limit - upper (%)	74 %(V) Hydrogen.
Flammability limit - lower (%)	4 %(V) Hydrogen.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	1.04 (77 °F (25 °C))
Solubility(ies)	
Solubility in water	Insoluble
Solubility (other)	No data available.
Partition coefficient (n-octanol/water)	No data available.
Auto-ignition temperature	932 °F (500 °C) Hydrogen.
Decomposition temperature	No data available.
Viscosity	200 - 600 mm2/s (77 °F (25 °C))

SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity No data available.

Chemical Stability Material is stable under normal conditions.

Possibility of hazardous reactions This product may generate hydrogen gas.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources.

Incompatible Materials

A fire or explosion hazard arises because highly flammable gas (hydrogen) is released when it is in contact with: Strong oxidizers, strong bases and chemical compounds with mobile hydrogen, in the presence of metal salts and complexes.

Hazardous Decomposition Products

This product can form formaldehyde vapors when heated to temperatures above 150 degrees C in the presence of air. Thermal decomposition or combustion may liberate carbon oxides, other toxic gases or vapors and amorphous silica.
Quantity of hydrogen potentially released (l/kg of product): ~38

SECTION 11: TOXICOLOGAICAL INFORMATION

Information on likely routes of exposure

Ingestion	No data available.
Inhalation	No data available.

Skin Contact No data available.
Eye contact No data available.

Symptoms related to the physical, chemical and toxicological characteristics
Ingestion No data available.
Inhalation No data available.
Skin Contact No data available.
Eye contact No data available.

Information on toxicological effects
Acute toxicity (list all possible routes of exposure)
Oral Product ATEmix: 2,500 mg/kg

Dermal Product No data available.

Inhalation Product No data available.

Repeated dose toxicity Product No data available.

Skin Corrosion/Irritation Product No data available.

Serious Eye Damage/Eye Irritation Product No data available.

Respiratory or Skin Sensitization Product No data available.

Carcinogenicity Product No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens
No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
No carcinogenic components identified

Germ Cell Mutagenicity
In vitro Product No data available.

In vivo Product No data available.

Reproductive toxicity Product No data available.

Specific Target Organ Toxicity - Single Exposure Product
No data available.

Specific Target Organ Toxicity - Repeated Exposure Product
No data available.

Aspiration Hazard Product No data available.

Other effects No data available.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish Product No data available.

Aquatic Invertebrates Product No data available.

Chronic hazards to the aquatic environment

Fish Product No data available.

Aquatic Invertebrates Product No data available.

Toxicity to Aquatic Plants Product No data available.

Persistence and Degradability

Biodegradation Product No data available.

BOD/COD Ratio Product No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF) Product No data available.

Partition Coefficient n-octanol / water (log Kow) Product
No data available.

Mobility in soil No data available.

Other adverse effects No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal instructions

Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Waste of this material should not be mixed with other waste. Provide measures such as vented bungs to ensure pressure relief in the waste container. Contaminated packages should be as empty as possible and equipped with a degassing device.

SECTION 14: TRANSPORT INFORMATION

This material is not subject to transport regulations.

Environmental hazards Not regulated.

Special precautions for user Packaging with a breathing/venting bung are

FORBIDDEN for transport by air.

SECTION 15: REGULATORY INVORMATION

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

__ Acute (Immediate) __ Chronic (Delayed) __ Fire __ Reactive __ Pressure Generating

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK No ingredient regulated by RI Right-to-Know Law present.

Inventory Status

US TSCA Inventory	On or in compliance with the inventory.
Canada DSL Inventory List	On or in compliance with the inventory.

EU EINECS List	On or in compliance with the inventory.
Japan (ENCS) List	On or in compliance with the inventory.
China Inv. Existing Chemical Substances	On or in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI)	On or in compliance with the inventory.
Australia AICS	On or in compliance with the inventory.
Philippines PICCS	On or in compliance with the inventory.
New Zealand Inventory of Chemicals	On or in compliance with the inventory.

SECTION 16: OTHER INFORAMTION

HMIS Hazard ID

Health	**1 - Slight**
Flammability	**1 - Slight**
Physical Hazards	**1 - Slight**
PERSONAL PROTECTION	**B – Safety Glasses and gloves**

NFPA Hazard ID

Flammability	**1 - Slight**
Health	**1 - Slight**
Reactivity	**1 - Slight**
Special Hazard	

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