IGS SILICONE SEALANT - ALUMINUM

| Version: | Revision Date: | MSDS Number: | Date Completed: |
|----------|----------------|--------------------|-----------------|
| 1.0 | 01/2025 | GHS –IGSRTVALUMXTB | 01/01/2020 |

SECTION 1. IDENTIFICATION

Product Name: IGS SILICONE SEALANT - Aluminum

Manufacturer or supplier's details

Company name of supplier: IGS Industries

Address: 200 Country Club Road

Meadowlands, PA 15347

Telephone: 800-229-1447

Emergency Telephone: 24 Hour Emergency Telephone:

800-229-1447

Recommended use of the chemical and restrictions on use

Recommended use: Adhesive, binding agents

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label Element

Not a hazardous substance or mixture.

Precautionary Statements: Prevention:

P271 Use only outdoors or in a well-ventilated area.

Other hazards: None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Chemical nature: Silicone elastomer

| Chemical Name | CAS-No. | Concentration (%) |
|--|------------|-------------------|
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | > = 5 - < 10 |
| Titanium dioxide | 13463-67-7 | >= 1 - < 5 |
| Aluminum | 7429-90-5 | >= 1 - < 5 |
| Carbon black | 1333-86-4 | >= 0.1 - < 1 |

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SECTION 4. FIRST AID MEASURES

If inhaled: If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact: Wash with water and soap as a precaution.

Get medical attention if symptoms occur.

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

Get medical attention if irritation develops and persists.

If swallowed: If swallowed, DO NOT induce vomiting.

Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Most important symptoms and effects,

both acute and delayed:

None known.

Protection of first-aiders: No special precautions are necessary for first aid responders.

Notes to physician: Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray

Alcohol-resistant foam

Dry chemical

Carbon dioxide (CO2)

Unsuitable extinguishing media: None known.

Specific hazards during fire-fighting: Exposure to combustion products may be a hazard to health.

Hazardous combustion products: Carbon oxides

Silicon oxides Formaldehyde Metal Oxides

Specific extinguishing methods: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

so.

Evacuate area.

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Special protective equipment for fire-

fighters:

Wear self-contained breathing apparatus for firefighting if

necessary.

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Follow safe handling advice and personal protective equipment

recommendations.

Environmental precautions: Discharge into the environment must be avoided.

Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment

and cleaning up:

Soak up with inert absorbent material.

For large spills, provide diking or other appropriate

containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate

container.

Clean up remaining materials from spill with suitable

absorbent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which

regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures: See Engineering measures under EXPOSURE CONTROLS/

PERSONAL PROTECTION section.

Local/Total ventilation: Use only with adequate ventilation.

Advice on safe handling: Handle in accordance with good industrial hygiene and safety

practice.

Take care to prevent spills, waste and minimize release to the

environment.

Conditions for safe storage: Keep in properly labeled containers.

Store in accordance with the particular national regulations.

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Materials to avoid: Do not store with the following product types:

Strong oxidizing agents.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

| Ingredients | CAS-No. | Value type (Form of exposure) | Control parameters/ Permissible concentration | Basis |
|--|------------|-------------------------------------|---|-----------|
| Silicon dioxide | 7631-86-9 | TWA (Dust) | 20 Million particles per cubic foot (Silica) | OSHA Z-3 |
| | | TWA (Dust) | 80 mg/m3 / %SiO2 (Silica) | OSHA Z-3 |
| | | TWA | 6 mg/m3 (Silica) | NIOSH REL |
| Disyillates (petroleum), hydrotreated middle | 64742-46-7 | TWA (Mist) | 5 mg/m3 | OSHA Z-1 |
| | | TWA (Mist) | 5 mg/m3 | OSHA PO |
| | | TWA (Mist) | 5mg/m3 | NIOSH REL |
| | | ST (Mist) | 10 mg/m3 | NIOSH REL |
| Titanium Dioxide | 13463-67-7 | TWA (Total Dust) | 15 mg/m3 | OSHA Z-1 |
| | | TWA | 10 mg/m3 (Titanium dioxide) | ACGIH |

Engineering measures: Processing may form hazardous compounds (see section 10).

Ensure adequate ventilation, especially in confined areas.

Minimize workplace exposure concentrations.

Personal protective equipment

Respiratory protection:

General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn.

Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

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Hand protection:

Remarks: Wash hands before breaks and at the end of workday.

Eye protection: Wear the following personal protective equipment:

Safety glasses.

Skin and body protection: Skin should be washed after contact.

Hygiene measures: Ensure that eye flushing systems and safety showers are

located close to the working place. When using, do not eat, drink or smoke. Wash contaminated clothing before re-use.

These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may

require added precautions.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Paste

Color: In accordance with the product description

Odor: Acetic acid

Odor Threshold: No data available

pH: Not applicable

Melting point/freezing point: No data available

Initial boiling point and boiling range: Not applicable

Flash point: Not applicable

Evaporation rate: Not applicable

Flammability (solid, gas): Not classified as a flammability hazard

Upper explosion limit: No data available

Lower explosion limit: No data available

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Vapor pressure: Not applicable

Relative vapor density: No data available

Relative density: 1.007

Solubility./(ies)

Water solubility: No data available

Partition coefficient: n-octanol/water: No data available

Autoignition temperature: No data available

Decomposition temperature: No data available

Viscosity

Viscosity, dynamic: Not applicable

Explosive properties: Not explosive

Oxidizing properties: The substance or mixture is not classified as oxidizing.

Molecular weight: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Use at elevated temperatures may form highly hazardous

compounds.

Can react with strong oxidizing agents.

Acetic acid is formed upon contact with water or humid air. When heated to temperatures above 150°C (300°F) in the presence of air, trace quantities of formaldehyde may be

released.

Adequate ventilation is required.

See OSHA formaldehyde standard, 29 CFR 1910.1048.

Hazardous decomposition products will be formed at elevated

temperatures.

Conditions to avoid: None known.

Incompatible materials: Oxidizing agents.

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Hazardous decomposition products:

Thermal decomposition: Formaldehyde

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SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute inhalation toxicity: Acute toxicity estimate: > 10 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Ingredients:

Silicon dioxide:

Acute oral toxicity: LD50 (Rat): > 3,300 mg/kg

Assessment: The substance or mixture has no

acute oral toxicity

Remarks: Information taken from reference

works and the literature.

Acute inhalation toxicity: LC50 (Rat):> 2.08 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no

acute inhalation toxicity

Remarks: Information taken from reference

works and the literature.

Acute dermal toxicity: LD50 (Rabbit): > 5,000 mg/kg

Assessment: The substance or mixture has no

acute dermal toxicity.

Remarks: Information taken from reference

works and the literature.

Distillates (petroleum), hydrotreated middle::

Acute oral toxicity: LD50 (Rat): >5,000 mg/kg

Acute inhalation toxicity: LC50 (Rat): 1.78 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

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Acute dermal toxicity: LD50 (Rat): >2,000 mg/kg

Titanium Dioxide:

Acute oral toxicity: LD50 (Rat): >5,000 mg/kg

Acute Inhalation Toxicity: LC50 (Rat): >6.82 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no

acute inhalation toxicity.

Skin corrosion/irritation

Not classified based on available information.

Ingredients:

Silicon dioxide:

Result: No skin irritation

Remarks: Information taken from reference works and the literature.

Titanium dioxide:

Species: Rabbit

Result: No skin irritation

Serious eye damage/eye irritation:

Not classified based on available information.

Ingredients:

Silicon dioxide:

Result: No eye irritation

Remarks: Information taken from reference works and the literature.

Titanium dioxide:

Result: No eye irritation

Remarks: Information taken from reference works and the literature.

Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

Ingredients:

Silicon dioxide:

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Assessment: Does not cause skin sensitization.

Test Type: Skin: test type not specified

Species: Guinea pig

Remarks: No known sensitizing effect.

Information taken from reference works and the literature.

Titanium dioxide:

Test Type: Local lymph node assay (LLNA)

Routes of exposure: Skin contact

Species: Mouse Result: negative

Germ cell mutagenicity

Not classified based on available information.

Ingredients:

Silicon dioxide:

Genotoxicity in vitro: Result: negative.

Remarks: Information taken from reference

works and the literature.

Genotoxicity in vivo: Application Route: Ingestion

Result: negative

Remarks: Information taken from reference

works and the literature.

Germ cell mutagenicity – Assessment: Animal testing did not show any mutagenic

effects.

Titanium dioxide:

Genotoxicity in vitro: Test Type: Bacterial reverse mutation assay

(AMES).

Result: negative.

Genotoxicity in vivo: Test Type: In vivo micronucleus test

Species: Mouse Result: negative.

.

Carcinogenicity

Not classified based on available information.

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Ingredients:

Titanium dioxide:Species: Rat

Application Route: Inhalation (dust/mist/fume)

Exposure Time: 24 Months

Method: OECD Test Guideline 453

Result: Positive

Remarks: The mechanism or mode of action may not be relevant in humans.

The substance is inextricably bound in the product and therefore does not contribute to a dust

inhalation hazard.

Carcinogenicity – Assessment: Limited evidence of carcinogenicity in

inhalation studies with animals.

IARC: Group 2B: Possibly carcinogenic to humans.

OSHA: No ingredient of this product present at levels

greater than or equal to 0.1% is identified as a

known carcinogen by OSHA.

NTP: No ingredient of this product present at levels

greater than or equal to 0.1% is identified as known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Ingredients:

Titanium dioxide:

Species: Rat

NOAEL: 24,000 mg/kg Application Route: Ingestion

Exposure Time: 28 d

Species: Rat NOAEL: 10 mg/m3

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Acute toxicity

Not classified based on available information.

Product:

Acute inhalation toxicity: Acute toxicity estimate: > 10 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Ingredients:

Silicon dioxide:

Acute oral toxicity: LD50 (Rat): > 3,300 mg/kg

Assessment: The substance or mixture has no

acute oral toxicity

SECTION 12. ECOLOGICAL INFORMATION

Exotoxicity

Ingredients:

Titanium dioxide:

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): >100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic

invertebrates:

EC 50 (Daphnia magna (Water flea)): >100 mg/l

Exposure time: 48 h

Toxicity to algae: EC50 (Skeletonema costatum (marine diatom)) >10,000

mg/l

Exposure time: 72 h

Toxicity to bacteria: EC50 >1,000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Other adverse effects: No data available

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SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methodsThis product has been evaluated for RCRA characteristics and

Resource Conservation and does not meet the criteria of hazardous waste if discarded in its

Recovery Act (RCRA): purchased form.

Waste from residues: Dispose of in accordance with local regulations.

Contaminated packaging: Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal.

SECTION 14. TRANSPORT CONSIDERATIONS

International Regulation

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

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SECTION 15. REGULATORY INFORMATION

EPCRA – Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

| 1 , | | | |
|------------------|----------|--------------|-----------------------|
| Ingredients | CAS-No. | Component RQ | Calculated product RQ |
| | | (lbs) | (lbs) |
| Acetic acid | 64-19-7 | 5000 | * |
| Acetic anhydride | 108-24-7 | 5000 | * |

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards: No SARA Hazards.

SARA 302: No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313: This material does not contain any chemical components

with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III,

Section 313.

US State Regulations

| Pennsy | Ivania | Right | To | Know |
|--------|--------|-------|----|------|
|--------|--------|-------|----|------|

| Dimethyl siloxane, hydroxyl-terminated | 70131-67-8 | 70 - 90 % |
|--|------------|-----------|
| Silicon dioxide | 7631-86-9 | 5 – 10% |
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | 5 – 10% |
| Titanium dioxide | 13463-67-7 | 1 – 5% |
| Acetic acid | 64-19-7 | 0 - 0.1% |
| Acetic anhydride | 108-24-7 | 0 - 0.1% |

New Jersey Right To Know

| Dimethyl siloxane, hydroxyl-terminated | 70131-67-8 | 70 - 90% |
|--|------------|----------|
| Silicon dioxide | 7631-86-9 | 5 - 10% |
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | 5 - 10% |
| Titanium dioxide | 13463-67-7 | 1 – 5% |

California Prop 65 This product does not contain any chemicals known to the

State of California to cause cancer, birth, or any other

reproductive defects.

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The ingredients of this product are reported in the following inventories:

AICS: All ingredients listed or exempt.

IECSC: All ingredients listed or exempt

PICCS: All ingredients listed or exempt.

DSL: All chemical substances in this product comply with the CEPA 1999

and NSNR and are on or exempt from listing on the Canadian

Domestic Substances List (DSL).

REACH: All ingredients (pre-)registered or exempt.

TSCA: All chemical substances in this material are included on or exempted

from listing on the TSCA Inventory of Chemical substances.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), NECSI (Taiwan), TSCA (USA).

SECTION 16. OTHER INFORMATION

Further Information

NFPA: HMIS III:



| HEALTH | 1 |
|-----------------|---|
| FLAMMABILITY | 1 |
| PHYSICAL HAZARD | 0 |

Full text of other abbreviations

ACGIH USA. ACGIH Threshold Limit Values (TLV).

NIOSH REL: USA. NIOSH Recommended Exposure Limits.

OSHA PO: USA. OSHA – Table Z-1 Limits for Air Contaminants –

1910.1000

OSHA Z-1 USA. Occupational Exposure Limits (OSHA) – Table Z-1 Limits

for Air Contaminants.

OSHA Z-3: USA. Occupational Exposure Limits (OSHA) – Table Z-3

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Mineral Dusts.

ACGIH / TWA 8-hour, time-weighted average.

NIOSH REL / TWA: Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek.

NIOSH REL / ST: STEL – 15 minute TWA exposure that should not be exceeded

at any time during a workday.

OSHA PO / TWA:

OSHA Z-1 / TWA:

OSHA Z-3 / TWA:

8-hour time weighted average.

8-hour time weighted average.

Sources of key data used to compile the Material

Safety Data Sheet:

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency,

http://echa.europa.eu/

Revision Date: Revision Date: 01/2025

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8