

TRACIT-300 Heat Transfer Compound-Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

1.1 Product identifier

Trade Name: **Chemax TRACIT-300 Heat Transfer Compound**

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

Recommended uses: Heat tracing, surface-to-surface heat conduction.

Not Recommended use: None known.

1.3 Details of the supplier of the safety data sheet

Chemax Manufacturing Corporation

1025 River Road

New Castle, Delaware 19720 USA

Telephone: 1-(800) 804-4596

E-mail (competent person): sales@chemax.com

Website: www.chemax.com

1.4 Emergency telephone number

Emergency information: 1-800-804-4596 ext. 2

National Poison Control Center: 1-800-222-1222

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS (US) Classification

Skin Irrit. 2

Eye Irrit. 2A

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2.2 GHS (US) label elements

pictogram



signal word

Warning

hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

precautionary statements

P264: Wash hands thoroughly after handling. Do not touch eyes.

P280: Wear protective gloves/protective clothing/eye protection.

P302+P352: IF ON SKIN: Wash with plenty of water.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

This substance/mixture does not meet the PBT or vPvB criteria of REACH regulation, annex XIII.

2.4 Additional information

Alkaline. Toxicity of sodium silicate depends on the pH and silica/alkali ratio.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not relevant (mixture).

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3.2 Mixtures

Does not contain any other ingredients that are classified.

Ingredient	CAS #	Wt %
Silicic acid, sodium salt-powders	1344-09-8	10-<20%

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General notes: Person(s) administering first aid should wear PPE (Personal Protective Equipment). If symptoms develop, seek medical attention.

Inhalation: Under typical conditions of intended use, material is not expected to be inhalation hazard. If symptoms exist, move to fresh air and seek medical attention.

Skin contact: Wash contact area with water. Get medical attention if irritation develops.

Eye contact: Remove contact lenses, if present and easy to do. Hold eye lids open and flush thoroughly with water for 15 minutes. If irritation persists, seek medical treatment.

Ingestion: Do not induce vomiting. Rinse mouth with fresh water. Call a doctor if symptoms persist.

4.2 Most important symptoms and effects, both acute and delayed

Alkaline. Irritating to skin and eyes.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

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5.1 Extinguishing media

Suitable extinguishing media

Water spray (fog), dry chemical, foam, or CO₂.

5.2 Special hazard arising from the substance or mixture

Not applicable. Material is not combustible.

5.3 Advice for firefighters

None.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Wear appropriate Personal Protective Equipment (PPE). Avoid contact with skin and eyes. Keep all unnecessary personnel out of the area. Clean up spills to prevent slipping hazards.

For emergency responders

Wear appropriate Personal Protective Equipment (PPE). Avoid direct skin/eye contact with material.

6.2 Environmental precautions

Avoid discharge into drain, surface, and ground waters. Contact authorities if discharge into sewers or public water occurs.

6.3 Methods and materials for containment and cleaning up

For containment

Cover drains. This compound has a high viscosity and will not likely leak.

Methods for cleaning up

Uncured/pliable material may be scraped-up and gathered using available tools.

Cured/hardened material is water-soluble, and water may be used to aid in dilution and clean up. Place collected material into a closed container for disposal. Follow local disposal regulations.

6.4 Reference to other sections

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Disposal considerations see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Wear protective gloves and goggles when handling.
 Avoid prolonged contact with skin, and direct contact with eyes.
 Follow good industrial hygiene and safety practices when handling.

7.2 Conditions for safe storage, including any incompatibilities

Store at room temperature in plastic or steel containers.
 Keep container lid sealed tightly when not in use.
 Protect product from direct contact with water, acids, zinc.

7.3 Specific end use(s)

No information

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

SUBSTANCE	Occupational Exposure Limits
Silicic acid, sodium salt	No Occupational Exposure Limit assigned.

Relevant DNELs of components of the mixture

SUBSTANCE: Silicic acid, sodium salt

Derived No Effect Level (DNEL)	Oral/ mg/kg bw/d	Inhalation/ mg/m ³	Dermal/ mg/kg bw/d
Workers - Acute - Systemic effects	-	-	-
Workers - Acute - Local effects	-	-	-

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Workers - Long Term - Systemic effects	-	5.61	1.59
Workers - Long Term - Local effects	-	-	-
Consumers - Acute - Systemic effects	-	-	-
Consumers - Acute - Local effects	-	-	-
Consumers - Long Term- Systemic effects	0.80	1.38	0.80
Consumers - Long Term- Local effects	-	-	-

	Predicted No Effect Concentration
PNEC-Freshwater	7.5 mg/l
PNEC-Marine Water	1 mg/l
PNEC-Water (Intermittent)	7.5 mg/l
PNEC-Sewage Treatment Plant (STP)	348 mg/l

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation of the workstation.

8.2.2 Individual protection measures, such as personal protective equipment

Eye/face protection



Safety glasses with side shields are recommended if contact is likely.

Skin protection



Wear suitable protective plastic or rubber gloves.

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Respiratory protection

In case of insufficient ventilation, or if irritation develops, wear suitable respiratory equipment. NIOSH/MSHA approved respiratory protection should be worn.

Thermal hazards

Not required.

8.2.3 Environmental exposure controls

Product is alkaline. Avoid release to water, sewage, or soil.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Dark grey
Odor and threshold	None
Melting point/freezing point	32 °F (0 °C)
pH (value)	10-11
Specific gravity	1.7
Solubility (water)	50%
Initial boiling point and boiling range	212-214°F (100-101 °C)
Flash point	Not applicable
Flammability	Non-combustible
Upper/lower explosion limit	Not explosive
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Vapour pressure	156 mmHg. at 143 °F (61.5 °C)
Vapour density	Not applicable
Partition coefficient	Not applicable

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

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Not reactive under normal conditions of intended use.

10.2 Chemical Stability

Stable if used in recommended temperature range.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Exposure to high temperatures will cause the desired hardening of compound.

10.5 Incompatible materials

Uncured compound will gel when mixed with acids. The compound may react with ammonium salts resulting in ammonia gas. May form carbon monoxide if mixed with sugar residue.

10.6 Hazardous decomposition products

Uncured compound will decompose when mixed with acids.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes

No data available for the complete mixture.

Classification procedure based on ingredients in compound (additivity).

Not classified as acutely toxic.

Silicic acid, sodium salt-powder (CAS: 1344-09-8)

Oral: LD50 (rat) >3400 mg/kg b.w.

Inhalation: LC50 (rat) >2.06 g/m³

Skin: LD50 (rat) >5000 mg/kg b.w.

Skin corrosion/irritation

Repeated and/or prolonged skin contact may cause slight irritation.

Serious eye damage/irritation

Liquid in uncured product may be mildly irritating to the eyes.

Respiratory or skin sensitization

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Not sensitizing.

Germ cell mutagenicity
Not classified.

Carcinogenicity
Not classified.

Reproductive toxicity
No evidence of reproductive toxicity.

STOT-single exposure
May cause respiratory irritation.

STOT-repeated exposure
Not classified.

Aspiration hazard
Not classified.

Other information
Skin or eye irritation only possible with uncured product.

11.2 Information on other hazards No additional information.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Not classified as hazardous to the aquatic environment.

Silicic acid, sodium salt-powder (CAS: 1344-09-8)

Fish (Brachydanio rerio): LC50 (96 hour) 1108 mg/l

Aquatic invertebrates (Daphnia magna): EC50 (48 hour) 1700 mg/l

Algae: EC50 (72h, speed of growth) (Scenedesmus subspicatus) > 345.4mg/l

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12.2 Persistence and degradability:

Sodium silicate rapidly de-polymerizes into a form indistinguishable from natural dissolved silica. Will not bio-accumulate.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

Product is a mixture of components that have been classified non-volatile in nature and therefore not expected to release to environment in significant quantities.

Alkalinity of this material may have a localized pH effect on ecosystems.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of product in accordance with local, regional, national, and/or international regulations. Prevent discharge into sewers or streams. Prevent discharge into sewers or streams. Alkalinity of this material may have a localized pH effect on ecosystems.

Packaging waste

Dispose of container in accordance with local, regional, national, and/or international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number

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Not subject to transport regulations.

14.2 UN proper shipping name

Not assigned.

14.3 Transport hazard class(es)

None.

14.4 Packing group

Not assigned.

14.5 Environmental hazards

Non-environmentally hazardous acc. to the dangerous goods regulations.

14.6 Special precautions for user

No additional information.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)
– additional information not assigned.

International Maritime Dangerous Goods Code (IMDG) - additional information

Not subject to IMDG.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

List of REACH substances with Annex XVII restrictions

None

List of substances subject to authorization (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

TSCA Inventory Status

Reported/Included.

AICS Inventory Status

Reported/Included.

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DSL/NDSL Inventory Status
Reported/Included.

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)
None of the ingredients are listed.

Regulation 98/2013/EU on the marketing and use of explosives precursors
None of the ingredients are listed.

Water Framework Directive (WFD)
None of the ingredients are listed.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this product by the manufacturer.

SECTION 16: OTHER INFORMATION

Indication of changes
Revised previous SDS format to current regulatory format.
Updated GHS classification.

Key to abbreviations and acronyms:

ADR -The European agreement concerning the international carriage of dangerous goods by road.

BLV - Biological limit values.

DNEL - Derived no-effect level.

EC50 - Half maximal effective concentration.

LC50 - Median lethal concentration.

LD50 - Median lethal dose.

PNEC - Predicted No Effect Concentration.

RID - The Regulations concerning the International Carriage of Dangerous Goods by Rail. STEL - Short-term exposure limit.

TWA - 8 hours' time-weighted average.