

SAFETY DATA SHEET

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

1.1. Product identifier:

Thermal Glue

Article numbers: R-457 – 70 ml
R-518 – 300 ml

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

Silicate adhesive designed for mounting, joining, and sealing automotive exhaust systems and damaged ceramic, fireclay, metal, and concrete pipes that supply and remove exhaust gases and liquids. For consumer and professional use.

1.3. Details of the supplier of the safety data sheet:

Information about the distributor:

AUTODOC SE

Josef-Orlopp-Str. 55, 10365 Berlin
Germany
Tel: +49 30 2202 6998

Information about the manufacturer:

NALMAT-Trzebinia
Marian Krzyworzeka
ul. Kościuszki 88
32-540 Trzebinia
tel. +48 32 612 10 10
fax. +48 32 612 10 66
www.technicqll.pl
office@technicqll.pl

1.3.1. Responsible person: -
E-mail: info1@autodoc.de

1.4. Emergency telephone number:

United Kingdom: National Poisons Information Service (NPIS)
NHS 111 (England), NHS 24 (Scotland) or NHS Direct (Wales) – dial 111
In Northern Ireland contact your local GP
Healthcare Professionals: UK NPIS 0344 892 0111

Belgium: Belgian Poison Control Center
Tel: 070 245 245 (free of charge)
8002 5500, from the Grand Duchy of Luxembourg

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008 (CLP):
Skin corrosion/irritation, Hazard Category 1 – H314

Hazard statements:

H314 – Causes severe skin burns and eye damage.

2.2. Label elements:

Components that define the hazards: Disodium metasilicate



Hazard statements:

H314 – Causes severe skin burns and eye damage.

Precautionary statements:

P102 – Keep out of reach of children.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P303 + P361 + P353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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

P405 – Store locked up.

P501 – Dispose of contents/container at a hazardous waste disposal site.

2.3. Other hazards:

The product has no other known specific hazards for human or environment.

The ingredients of the product do not meet the criteria for PBT or vPvB substances in accordance with Annex XIII of Regulation 1907/2006/EC.

Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances:

Not applicable.

3.2. Mixtures:

Description	CAS number	EC number / ECHA list number	REACH registration number	Conc. (%)	Classification according to Regulation (EC) No 1272/2008 (CLP)		
					Pictogram, signal word code(s)	Hazard class and category code(s)	Hazard statement code(s)
Disodium metasilicate Index number: 014-010-00-8	6834-92-0	229-912-9	01-2119449811- 37-0005	5 – 10	GHS05 GHS07 Danger	Skin Corr. 1B STOT SE 3	H314 H335

For the full text of hazard statements, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

INGESTION:

Measures:

- Rinse mouth thoroughly with water.
- Seek medical attention and provide product information.

INHALATION:

Measures:

- Remove the victim from the exposure site.
- Take the victim into fresh air and let him rest.
- If irritation persists, consult a doctor.

SKIN CONTACT:

Measures:

- Rinse the irritated area carefully with water.
- If irritation persists, consult a dermatologist.

EYE CONTACT:

Measures:

- Rinse eyes with plenty of water for at least 15 minutes.
- If irritation persists, seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed:

Causes severe skin burns and eye damage.

4.3. Indication of any immediate medical attention and special treatment needed:

The emergency treatment method is decided by a doctor after a thorough assessment of the condition of the injured person.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

5.1.1. Suitable extinguishing media:

CO₂, dry powder, water spray, alcohol-resistant foam.

5.1.2. Unsuitable extinguishing media:

Water jet.

5.2. Special hazards arising from the substance or mixture:

The product is not flammable.

5.3. Advice for firefighters:

Basic rules of handling a fire in the vicinity:

Immediately notify the Fire Department, notify the surrounding area about the fire, ensure a clear evacuation route, remove all persons not involved in extinguishing the fire from the danger zone, cool tanks exposed to fire or high temperatures with water from a safe distance.

Specialized protective equipment: Protective clothing and self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

6.1.1. For non-emergency personnel:

Allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

Restrict access to the accident area until appropriate cleanup operations have been completed. Avoid contamination of eyes and skin. Ensure adequate ventilation.

6.1.2. For emergency responders:

Ensure that only trained personnel are involved in the cleanup and recovery operations.

Personal protection: Avoid direct contact with the mixture. Wear protective clothing, gloves, and footwear.

General information:

Immediately secure the source of the leak, shut off the grease flow, and seal the leak.

Ensure a clear evacuation route.

In case of a major spill, call the chemical emergency services.

Evacuate all persons not involved in the rescue operation from the danger zone.

Remove sources of ignition.

Do not use sparking tools.

6.2. Environmental precautions:

Place damaged packaging in emergency packaging and stop the leakage if it can be done without risk.

Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

6.3. Methods and material for containment and cleaning up:

Small spillage: In case of spillage, wipe off the adhesive with a cloth, scrape it off, and then collect it in special containers. Dispose of in accordance with local and national regulations.

Larger spillage: Cover with non-flammable absorbent material, e.g., sand, and then collect in special containers. Dispose of in accordance with local and national regulations. Escaping vapours or mists of the product may create a fire or explosion hazard.

Warning: Materials such as rags, paper, etc. soaked in the product pose a fire hazard. Therefore, do not allow these materials to accumulate, but dispose of them safely.

6.4. Reference to other sections:

For further and detailed information see Sections 7, 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:

Observe conventional hygiene precautions.
 Observe basic safety and hygiene rules and workplace instructions.
 Keep away from children.
 Do not store together with food, beverages, or animal feed.
 Avoid contamination of skin, eyes, and accidental consumption.
 Wash hands thoroughly after finishing work.

Technical measures:

Corrosive product. Store large quantities under lock and key.
 Do not spill.
 Wear appropriate protective clothing, suitable protective gloves, and goggles or face protection.

Precautions against fire and explosion:

No special measures required.

7.2. Conditions for safe storage, including any incompatibilities:

Technical measures and storage condition:

Store in dry and well-ventilated rooms, in sealed containers at temperatures between +50°C and +250°C.
 Store the product away from oxidizing agents, acids, and bases that may cause corrosion of containers.
 Do not store the product near foodstuffs.
 Protect packaging and containers with the product from heat, direct sunlight, and sources of ignition.

Incompatible materials: See Section 10.5.

Packaging material: No special prescriptions.

7.3. Specific end use(s):

No specific instructions available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Occupational exposure limit values

United Kingdom (EH40/2005 Workplace Exposure Limits):

The components of the mixture are not regulated with exposure limit value.

Belgium (Code of Well-being at Work: Book VI.- Chemical agents, carcinogens, mutagens, reprotoxic agents, and agents with endocrine-disrupting properties (M.B. 10.6.2024):

The components of the mixture are not regulated with exposure limit value.

Disodium metasilicate (CAS: 6834-92-0):

DNEL values		Oral exposure		Dermal exposure		Inhalative exposure	
		Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)
Consumer	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	0.74 mg/kg bw/day	no data	0.74 mg/kg bw/day	no data	1.55 mg/m ³
Worker	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	1.49 mg/kg bw/day	no data	6.22 mg/m ³

PNEC values		
Compartment	Value	Note(s)
Freshwater	7.5 mg/l	no notes
Marine water	1.0 mg/l	no notes
Freshwater sediment	no data	no notes
Marine water sediment	no data	no notes
Sewage Treatment Plant (STP)	1000 mg/l	no notes
Intermittent release	7.5 mg/l	no notes
Secondary poisoning	no data	no notes
Soil	no data	no notes

8.2. Exposure controls:

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

8.2.1. Appropriate engineering controls:

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin. Ensure adequate ventilation.

8.2.2. Individual protection measures, such as personal protective equipment:

Observe general safety and hygiene rules.

Do not eat, drink, or smoke during work.

Wash hands thoroughly before breaks and after finishing work.

Avoid contact with eyes.

1. **Eye/face protection:** Use appropriate protective glasses (EN ISO 16321-1:2022; EN 166).

2. **Skin protection:**

a. **Hand protection:** Use chemical-resistant protective gloves (EN 374).

b. **Other:** Use appropriate work clothes.

3. **Respiratory protection:** Use appropriate dust mask with P1 filter.

4. **Thermal hazards:** No thermal hazards known.

8.2.3. Environmental exposure controls:

No specific prescription.

The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, an expert's advice is necessary before deciding upon further protective measures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

Parameter	Value / Test method / Remarks
1. Physical state	paste
2. Colour	grey
3. Odour, odour threshold	no data*
4. Melting point/freezing point	no data*
5. Boiling point or initial boiling point and boiling range	110 – 120 °C
6. Flammability	no data*
7. Lower and upper explosion limit	no data*
8. Flash point	no data*
9. Auto-ignition temperature	no data*
10. Decomposition temperature	no data*
11. pH	12.79
12. Kinematic viscosity	no data*
13. Solubility in water in other solvents	soluble no data*
14. Partition coefficient n-octanol/water (log value)	no data*
15. Vapour pressure	no data*
16. Density and/or relative density	1.9 – 2.3 g/cm ³
17. Relative vapour density	no data*
18. Particle characteristics	no data*

9.2. **Other information:**

9.2.1. **Information with regard to physical hazard classes:**

No further data available or not applicable for the product.

9.2.2. **Other safety characteristics:**

Solidification temperature: approx. -2 °C

*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet, or the property is not applicable for the product.

SECTION 10: STABILITY AND REACTIVITY

10.1. **Reactivity:**

No reactivity known.

10.2. **Chemical stability:**

Stable under intended use and storage.

10.3. **Possibility of hazardous reactions:**

Reacts with strong oxidizing agents.

10.4. **Conditions to avoid:**

Keep away from sources of ignition, heat, and direct sunlight.

10.5. **Incompatible materials:**

Store the product away from oxidizing agents, acids, and bases that may cause corrosion of containers.

10.6. **Hazardous decomposition products:**

No hazardous decomposition products occur if stored properly.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. **Information on hazard classes as defined in Regulation (EC) No 1272/2008:**

Acute toxicity: Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

11.1.1. **Summaries of the information derived from the test conducted:**

No data available.

11.1.2. **Relevant toxicological properties:**

No data available about the product.

Information about the components:

Hectorite compound:

Acute toxicity:

LD₅₀ (oral, rat): >20,000 mg/kg

LD₅₀ (oral, rat): 1153 mg/kg – for sodium metasilicate alone.

11.1.3. **Information on likely routes of exposure:**

Ingestion, inhalation, skin contact, eye contact.

11.1.4. **Symptoms related to the physical, chemical and toxicological characteristics:**

Inhalation: Vapours of the mixture may cause tearing and eye pain, redness of the conjunctiva, coughing, and a burning sensation in the throat and nose. In higher concentrations, it causes pain and dizziness, weakness, nausea, and vomiting. Exposure to very high concentrations of the product vapours may cause respiratory distress, loss of consciousness, and even death. Local and general ventilation is required.

Skin: Contamination of the skin with the preparation may cause local redness, pain, itching, and degreasing of the skin, which may lead to inflammation.

Eyes: Eye contamination causes pain, redness of the conjunctiva, and tearing.

Ingestion: Swallowing the product may cause pain in the throat, oesophagus, and stomach, and symptoms similar to those of inhalation poisoning may occur.

11.1.5. **Delayed and immediate effects as well as chronic effects from short and long-term exposure:**

Causes severe skin burns and eye damage.

- 11.1.6. Interactive effects:**
No data available.
- 11.1.7. Absence of specific data:**
No information.
- 11.2. Information on other hazards:**
Endocrine disrupting properties:
Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.
Other information:
No data available.

SECTION 12: ECOLOGICAL INFORMATION

- 12.1. Toxicity:**
The mixture has not been classified as hazardous to the environment, but it may have a negative impact on the ecosystem by increasing the pH of water and soil. Therefore, the product should not be allowed to enter groundwater or soil.
- 12.2. Persistence and degradability:**
No data available.
- 12.3. Bioaccumulative potential:**
It does not have the potential for bioaccumulation.
- 12.4. Mobility in soil:**
Easily absorbed into the soil.
- 12.5. Results of PBT and vPvB assessment:**
The ingredients of the product do not meet the criteria for PBT or vPvB substances in accordance with Annex XIII of Regulation 1907/2006/EC.
- 12.6. Endocrine disrupting properties:**
Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.
- 12.7. Other adverse effects:**
No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1. Waste treatment methods:**
Disposal according to the local regulations.
- 13.1.1. Information regarding the disposal of the product:**
Cover the waste with absorbent material, e.g., sand, diatomaceous earth, sawdust – collect in sealable containers and dispose of in accordance with local and national regulations.
Handling of waste product:
Do not allow the product to enter drains, water reservoirs, or sewage systems. Small quantities at the consumer's premises – treat as household waste. Do not dispose of large quantities of waste product with municipal waste. Dispose of in authorized incinerators or waste treatment/disposal facilities in accordance with applicable regulations.
List of Waste Code:
08 04 09* waste adhesives and sealants containing organic solvents or other hazardous substances
*: Hazardous waste.
- 13.1.2. Information regarding the disposal of the packaging:**
Dispose of contaminated packaging in accordance with applicable regulations.
Handling of waste packaging by consumers:
Treat product packaging as household waste. Treatment of waste packaging with product residues (larger quantities).
Dispose of in accordance with applicable regulations.
List of Waste Code:
15 01 10* packaging containing residues of or contaminated by hazardous substances
*: Hazardous waste.
- 13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:**
No data available.
- 13.1.4. Sewage disposal:**
No data available.
- 13.1.5. Special precautions for any recommended waste treatment:**
No data available.

SECTION 14: TRANSPORT INFORMATION

- 14.1. **UN number or ID number:**
UN 1719
- 14.2. **UN proper shipping name:**
ADR/RID: CAUSTIC ALKALI LIQUID, N.O.S.
IMDG; IATA: CAUSTIC ALKALI LIQUID, N.O.S.
- 14.3. **Transport hazard class(es):**
8
- 14.4. **Packing group:**
III
- 14.5. **Environmental hazards:**
Not applicable.
- 14.6. **Special precautions for user:**
When handling the load, wear personal protective equipment in accordance with section 8.
ADR/RID: Limited quantities: 5 L
Exempted quantities: E1
Tunnel restriction code: (E)
- 14.7. **Maritime transport in bulk according to IMO instruments:**
Not applicable.

SECTION 15: REGULATORY INFORMATION

- 15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture:**

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive (EC) No 1999/45 and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive (EEC) No 76/769 and Commission Directives (EEC) No 91/155, (EEC) No 93/67, (EC) No 93/105 and (EC) No 2000/21

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives (EEC) No 67/548 and (EC) No 1999/45, and amending Regulation (EC) No 1907/2006

COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

The mixture does not contain any substance listed in Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

- 15.2. **Chemical safety assessment:** No information.

SECTION 16: OTHER INFORMATION

Information regarding the revision of the safety data sheet: No information.

Literature references / data sources:

Safety data sheet issued by the manufacturer (22. 01. 2017, PL).

Methods used for the classification according to Regulation (EC) No 1272/2008:

Classification	Method
Skin corrosion/irritation, Hazard Category 1 – H314	Based on calculation method

Relevant hazard statements (code and full text) of Sections 2 and 3:

H314 – Causes severe skin burns and eye damage.

H335 – May cause respiratory irritation.

Training advice: No data available.

Full text of the abbreviations in the safety data sheet:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate.
AOX: Adsorbable organic halides.
BCF: Bioconcentration factor.
BOD: Biological Oxygen Demand.
CAS number: Chemical Abstract Service number.
CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
CMR effects: Carcinogenic, mutagenic, reprotoxic effects.
COD: Chemical Oxygen Demand.
CSA: Chemical Safety Assessment.
CSR: Chemical Safety Report.
DNEL: Derived-No-Effect-Level.
ECHA: European Chemical Agency.
EC: European Community.
EC number: EINECS and ELINCS numbers (see also EINECS and ELINCS).
EEC: European Economic Community.
EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
EN: European Norm.
EU: European Union.
EuPCS: European Product Categorisation System.
EWC: European Waste Catalogue (replaced by LoW – see below).
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
IATA: International Air Transport Association.
ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
IMO: International Maritime Organization.
IMSBC: International Maritime Solid Bulk Cargoes.
IUCLID: International Uniform Chemical Information Database.
IUPAC: International Union of Pure and Applied Chemistry.
Kow: n-Octanol - Water Partition Coefficient.
LC50: Lethal concentration resulting in 50 % mortality.
LD50: Lethal dose resulting in 50 % mortality (median lethal dose).
LoW: List of Waste.
LOEC: Lowest Observed Effect Concentration.
LOEL: Lowest Observed Effect Level.
NOEC: No Observed Effect Concentration.
NOEL: No Observed Effect Level.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
OECD: Organization for Economic Cooperation and Development.
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic.
PNEC: Predicted No Effect Concentration.
QSAR: Quantitative Structure Activity Relationship.
REACH: Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.
SCBA: Self Contained Breathing Apparatus.
SDS: Safety Data Sheet.
STOT: Specific Target Organ Toxicity.
SVHC: Substances of Very High Concern.
UN: United Nations.
UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products or of Biological Materials.
VOC: Volatile Organic Compound.
vPvB: very Persistent and very Bioaccumulative.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information.

The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product.

It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

Safety data sheet was prepared by:

MSDS-Europe
International branch of ToxInfo Kft.

Professional help regarding
the explanation of the safety
data sheet:

+36 70 335 8480; info@msds-europe.com
www.msds-europe.com

