

SAFETY DATA SHEET Uncured Glass Mineral Wool Insulation

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name Uncured Glass Mineral Wool Insulation

Product number KI_DP_108

Synonyms; trade names Amber Uncured Blanket Insulation, Black Uncured Blanket Insulation, Black Uncured Blanket

Insulation SR

Revision date: 12/06/2019

Recommended use of the chemical and restrictions on use

Application Thermal and/or acoustic insulation for use in technical applications, industrial applications and

in building construction.

Uses advised against None known.

Details of the supplier of the safety data sheet

Supplier Knauf Insulation, Inc.

One Knauf Drive Shelbyville IN 46176-1496 Tel: 800 825 4434 www.knaufinsulation.us sds@knaufinsulation.com

Region: United States, Central & South America

Emergency telephone number

Emergency telephone 24hrs: Chemtrec Tel: 800 424 9300

2. Hazard(s) identification

Classification of the substance or mixture

OSHA Regulatory Status This Product is Hazardous under the OSHA Hazard Communication Standard.

Physical hazards Not Classified

Health hazards Skin Sens. 1 - H317 Carc. 1B - H350

Environmental hazards Not Classified

Label elements

Hazard symbols





Signal word Danger

Hazard statements H317 May cause an allergic skin reaction.

H350 May cause cancer.

Precautionary statements P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust.

P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P302+P352 If on skin: Wash with plenty of water.

P308+P313 If exposed or concerned: Get medical advice/ attention.

P321 Specific treatment (see Section 4 of the SDS).

P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/ container in accordance with national regulations.

Contains Urea extended phenol formaldehyde resin, Formaldehyde

Supplemental label

information

See Section 16.

Other hazards

Physical Hazards None.

Health Hazards May cause cancer. Mechanical irritation of the skin, eyes and upper respiratory system.

Environmental Hazards None.

Main symptoms Prolonged and repeated exposure may cause cancer. Repeated or prolonged exposure may

cause an allergic skin reaction. Contact with skin, eyes and upper respiratory system may cause mechanical irritation. Biosoluble glass mineral wool is classified as a nuisance dust by

OSHA.

3. Composition/information on ingredients

Mixtures

Biosoluble glass mineral wool

83 - 91%

CAS number: -

Ingredient notes:(1)(2)

Classification

Not Classified

Urea extended phenol formaldehyde resin

3 - 14%

CAS number: 25104-55-6

Classification

Skin Sens. 1B - H317

Carbon black 0 - 1%

CAS number: 1333-86-4

Classification

Not Classified

Disposable Low Density Polyethylene Interleaving

1%

CAS number: —

Classification

Not Classified

Phenol 0.65% max

CAS number: 108-95-2

Classification

Acute Tox. 3 - H301

Acute Tox. 3 - H311

Acute Tox. 3 - H331

Skin Corr. 1B - H314

Eye Dam. 1 - H318 Muta. 2 - H341

STOT RE 2 - H373

Aquatic Chronic 2 - H411

Uncured Glass Mineral Wool Insulation

CAS number: 50-00-0

Classification
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 2 - H330
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Muta. 2 - H341
Carc. 1B - H350

The full text for all hazard statements is displayed in Section 16.

Ingredient notes

STOT SE 3 - H335

- (1) Man made vitreous (silicate) fibers with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+MgO+BaO) content greater than 18% by weight meeting the requirements of Note Q of regulation n° 1272/2008 and therefore not classified carcinogenicity.
- (2) All Knauf Insulation products covered by this SDS are independently certified by EUCEB to be manufactured using biosoluble glass fibers formulations and thus the glass wool fibers are exempt from labelling under NTP or California Prop 65 requirements.

Specific chemical identity and/or exact percent concentration is withheld as trade secret.

4. First-aid measures

Description of first aid measures

General information Show this Safety Data Sheet to the medical professional in attendance. If symptoms occur,

follow first aid measures as appropriate.

Notes to Physician: No specific recommendations.

Inhalation Remove from exposure. Rinse the throat and clear dust from airways.

Ingestion Drink plenty of water if accidentally ingested.

Skin Contact Wash with mild soap and warm water after each exposure. If skin irritation or rash occurs: Get

medical advice/ attention. Wash contaminated clothing before reuse. If mechanical irritation occurs, remove contaminated clothing and wash skin gently with cold water and soap.

Eye contact Rinse abundantly with water for at least 15 minutes.

Most important symptoms and effects, both acute and delayed

General information Prolonged and repeated exposure may cause cancer. Repeated or prolonged exposure may

cause an allergic skin reaction. Contact with skin, eyes and upper respiratory system may cause mechanical irritation. Biosoluble glass mineral wool is classified as a nuisance dust by

OSHA.

Indication of immediate medical attention and special treatment needed

professional medical advice.

Specific treatments No specific recommendations.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Water, foam, carbon dioxide (CO2), and dry powder.

Special hazards arising from the substance or mixture

General information Products do not pose a fire hazard in use; however, some packaging materials or facings may

be combustible. In fire conditions, the binder will decompose giving off carbon monoxide, carbon dioxide, carbon particulate and traces of hydrogen cyanide from pyrolysis of the resin.

Advice for firefighters

General information In large fires in poorly ventilated areas involving packaging materials respiratory protection /

breathing apparatus may be required.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Minimize direct contact with skin in order to prevent mechanical itching. In dusty

environments, use suitable respiratory protection such as 3M 8210, N95 or equivalent. Use glasses or goggles when working with mineral wool insulation above shoulder height or in dusty environments. Where possible, use natural ventilation during installation in order to

minimize dust levels.

After contact with the product, rinse skin in cold water to reduce potential effects of mechanical itching. Dispose of surplus product in accordance with local regulations.

Use personal protection recommended in Section 8 of the SDS.

Environmental precautions

Environmental precautions Not relevant.

Methods and material for containment and cleaning up

Methods for cleaning up In dusty environments, use vacuum equipment where possible to minimize dust levels.

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid breathing dust. Assure proper respiratory protection if

dust potential exceeds PEL/TLV. Wear protective gloves/ protective clothing/ eye protection/

face protection. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage precautions To ensure optimum product performance; when packaging is removed or opened; products

should be stored inside or covered to protect them from ingress of rain water or snow. Storage arrangements should ensure stability of stacked products and use on a first in first out

basis (FIFO) is recommended.

Specific end uses(s)

Specific end use(s) Thermal and/or acoustic insulation for use in technical applications, industrial applications and

in building construction.

8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits

Biosoluble glass mineral wool

Long-term exposure limit (8-hour TWA): ACGIH, (Notes: (A3)) 1 f/cc Glass wool fibers

Long-term exposure limit (8-hour TWA): NIOSH 5 mg/m³ Mineral wool fiber, total particulate

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ Particulates not otherwise regulated (PNOR), respirable fraction

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ Particulates not otherwise regulated (PNOR), total dust

Carbon black

Long-term exposure limit (8-hour TWA): ACGIH 3 mg/m³ inhalable fraction

А3

Long-term exposure limit (8-hour TWA): OSHA 3.5 mg/m³

Disposable Low Density Polyethylene Interleaving

Long-term exposure limit (8-hour TWA): OSHA, ACGIH 5 mg/m³ respirable dust Long-term exposure limit (8-hour TWA): ACGIH, OSHA 10 mg/m³ total dust

Phenol

Long-term exposure limit (8-hour TWA): NIOSH, (Notes: Sk, CT) 5 ppm 19 mg/m³

Ceiling exposure limit: NIOSH, (Notes: Sk, CT) 15.6 ppm 60 mg/m³

Long-term exposure limit (8-hour TWA): OSHA, (Notes: Sk) 5 ppm 19 mg/m³

Long-term exposure limit (8-hour TWA): ACGIH, (Notes: A4, Sk, BEI) 5 ppm 19 mg/m³

Formaldehyde

Ceiling exposure limit: ACGIH 0.3 ppm 0.37 mg/m³

A2, DSens, RSens

Long-term exposure limit (8-hour TWA): OSHA 0.75 ppm Short-term exposure limit (15-minute): OSHA 2 ppm

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.

A2 = Suspected Human Carcinogen.

DSens = Dermal sensitizer.

RSens = Respiratory sensitizer.

NIOSH = The National Institute for Occupational Safety and Health.

Ingredient comments

(A3) - Fibers longer than 5 μ m; diameter less than 3 μ m; aspect ratio greater than 5:1 as determined by the membrane filter method at 400-450X magnification (4-mm objective) phase contrast illumination.

Biosoluble glass mineral wool - See section 3.

Ca = Potential occupational carcinogen

CT = Ceiling time.

DSens = Dermal sensitizer. RSens = Respiratory sensitizer. A2 = Suspected Human Carcinogen.

Sk = Danger of cutaneous absorption

Sk = Danger of cutaneous absorption.

A4 = Not Classified as a Human Carcinogen.

BEI = Biological Exposure Index.

Carbon black (CAS: 1333-86-4)

Immediate danger to life

and health

1750 mg/m³

Phenol (CAS: 108-95-2)

Immediate danger to life

and health

250 ppm

Formaldehyde (CAS: 50-00-0)

Immediate danger to life 20 ppm 20 ppm and health

Exposure controls

Appropriate engineering

controls

Maintain sufficient mechanical or natural ventilation to assure fiber concentrations remain below PEL/TLV. Use local exhaust if necessary. Power equipment should be equipped with

properly designed dust collection devices.

Eye/face protectionUse glasses or goggles when working with mineral wool insulation above shoulder height or in

dusty environments.

Other skin and body

protection

Minimize direct contact with skin in order to prevent mechanical itching. Gloves suitable for protection from chemicals are recommended to minimize effects from uncured binder and

fibers. Rinse washer thoroughly.

Hygiene measures After contact with the product, rinse skin in cold water to reduce potential effects of

mechanical itching.

Respiratory protection In dusty environments, use suitable respiratory protection.

Thermal hazards Not relevant.

Environmental exposure

controls

Not relevant.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Solid.

Rolls. Panel. Loose fiber.

Color White. / Yellow. / Black.

Odor Phenol formaldehyde odor

Odor threshold No data available.

pH Not relevant.

Melting point Not relevant.

Initial boiling point and range Not relevant.

Flash point Not relevant.

Evaporation rate Not relevant.

Flammability (solid, gas) Not relevant.

Upper/lower flammability or

explosive limits

Not relevant.

Vapor pressure

Not relevant.

Vapor density

Not relevant.

7 - 96 kg/m³

Solubility(ies) Generally chemically inert and slightly soluble in water.

Partition coefficient Not relevant.

Auto-ignition temperature Not relevant.

Decomposition Temperature Not relevant.

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Viscosity Not relevant.

Explosive properties Not relevant.

Oxidizing properties Not relevant.

Nominal diameter of fibers. 3 - 8µm

Length weight geometric mean diameter less 2 standard errors

< 6 µm

Orientation of fibers Random

10. Stability and reactivity

Reactivity None.

Stability This is a stable, non-reactive product.

Possibility of hazardous

reactions

None.

Conditions to avoid None.

Materials to avoid Hydrofluoric acid will react with and dissolve glass.

Hazardous decomposition

products

Thermal decomposition of the resin may include carbon dioxide, carbon monoxide, and traces

of carbon particulate.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met. Estimated value.

ATE oral (mg/kg) 13,757.0

Acute toxicity - dermal

Notes (dermal LD50) Based on available data the classification criteria are not met. Estimated value.

ATE dermal (mg/kg) 57,951.0

Acute toxicity - inhalation

Notes (inhalation LC50) Based on available data the classification criteria are not met. Estimated value.

ATE inhalation (gases ppm) 231,500.0

ATE inhalation (dusts/mists

mg/l)

138.0

Skin corrosion/irritation

Skin corrosion/irritation May cause mechanical irritation to skin.

Serious eye damage/irritation

Serious eye damage/irritation May cause mechanical irritation to eyes.

Respiratory sensitization

Respiratory sensitization Based on available data the classification criteria are not met.

Skin sensitization

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Skin sensitization Sensitizing. May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitroBased on available data the classification criteria are not met.

Genotoxicity - in vivoBased on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity May cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity -

Based on available data the classification criteria are not met.

development

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

Aspiration hazard Not relevant.

General information Formaldehyde was found to be corrosive to the eyes of rabbits. Formaldehyde was sensitizing

in the guinea pig maximization test and the local lymph node assay with mice; however, there

was no evidence of respiratory sensitization in various studies in mice.

The uncured resin contains up to 0.2 % free formaldehyde. The International Agency for Research on Cancer (IARC) has classified formaldehyde as a Group 1 human carcinogen (June 2004). Formaldehyde did not cause reproductive and/or developmental effects when tested in animals. Repeated formaldehyde exposure caused toxic effects only in the tissues of direct contact after inhalation, oral or dermal exposure characterised by local cytotoxic destruction and subsequent repair of the damage. The typical locations of lesions in

experimental animals were the nose after inhalation, the stomach after oral administration and

the skin after dermal application.

Inhalation Mechanical irritation to upper respiratory tract.

Ingestion Non-hazardous when ingested.

Skin Contact Repeated or prolonged exposure may cause an allergic skin reaction. Mechanical irritation to

skin.

Eye contact Mechanical irritation to eyes.

Acute and chronic health

hazards

May cause cancer. May cause an allergic skin reaction.

Medical Symptoms Prolonged and repeated exposure may cause cancer. Repeated or prolonged exposure may

cause an allergic skin reaction. Contact with skin, eyes and upper respiratory system may cause mechanical irritation. Biosoluble glass mineral wool is classified as a nuisance dust by

OSHA.

Toxicological information on ingredients.

Phenol

Acute toxicity - oral

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Notes (oral LD₅₀) Estimated value.

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

Acute toxicity dermal (LD50 660.0

mg/kg)

Species Rat

ATE dermal (mg/kg) 660.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l)

0.9

Species Rat

ATE inhalation

0.9

(dusts/mists mg/l)

Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin.

Serious eye damage/irritation

Serious eye

Causes serious eye damage.

damage/irritation

Respiratory sensitization

Respiratory sensitization No data available.

Skin sensitization

Skin sensitization Not sensitizing.

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Positive.

Carcinogenicity

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

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity

Reproductive toxicity -

Based on available data the classification criteria are not met.

fertility

Reproductive toxicity -

Based on available data the classification criteria are not met.

development

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Target organs Kidneys Liver Skin Nervous system

Aspiration hazard

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Aspiration hazard Not relevant.

Formaldehyde

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

260.0

Species Guinea pig

ATE oral (mg/kg) 260.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 270.0

mg/kg)

Species Rabbit

ATE dermal (mg/kg) 270.0

Acute toxicity - inhalation

Acute toxicity inhalation

(LC₅₀ gases ppmV)

463.0

Species Rat

ATE inhalation (gases

ppm)

463.0

Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin.

Serious eye damage/irritation

Serious eye

Causes serious eye damage.

damage/irritation

Respiratory sensitization

Respiratory sensitization Guinea pig: Not sensitizing.

Skin sensitization

Skin sensitization Sensitizing. May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitroGene mutation: Positive.

Carcinogenicity

Carcinogenicity May cause cancer.

IARC carcinogenicity IARC Group 1 Carcinogenic to humans.

NTP carcinogenicity Known human carcinogen.

OSHA Carcinogenicity Listed as a carcinogen under OSHA

Reproductive toxicity

Reproductive toxicity -

fertility

No evidence of reproductive toxicity in animal studies.

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Reproductive toxicity -

No evidence of reproductive toxicity in animal studies.

development

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

Aspiration hazard Not relevant.

12. Ecological information

Toxicity This product is not ecotoxic to air, water or soil, by composition.

Persistence and degradability

Persistence and degradability No data available.

Bioaccumulative potential

Bio-Accumulative Potential No data available.

Partition coefficient Not relevant.

Mobility in soil

Mobility No data available.

Other adverse effects

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

General information Dispose of in accordance with all applicable regulations. Empty containers should be taken to

an approved waste handling site for recycling or disposal.

Disposal methods This product is not regulated under RCRA Hazardous Waste Regulations. May be disposed in

landfill. If unsure, contact the local office of the USEPA, your local public health department or

the local landfill regulators.

14. Transport information

General The product is not covered by international regulations on the transport of dangerous goods

(IMDG, IATA, DOT).

UN Number

UN No. (International) Not applicable.

UN proper shipping name

Proper shipping name

(International)

Not applicable.

Transport hazard class(es)

Transport Labels (International)

No transport warning sign required.

Packing group

Packing group (International) Not applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not applicable.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

Regulatory Status

The product is classified as hazardous.

In accordance with industry practice, Knauf Insulation has decided to continue to provide its customers with the appropriate information for the purpose of assuring safe handling and use of mineral wool throughout the product life.

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

The following ingredients are listed:

Formaldehyde

EPCRA 302 TPQ 500 lbs Tier II TPQ 500 lbs

Phenol

EPCRA 302 TPQ 10000 lbs TPQ if the solid exists in powdered form and has a particle size less than 100 microns 500 lbs Tier II TPQ 500 lbs

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed:

Formaldehyde

Final CERCLA RQ: 100(45.4) pounds (Kilograms)

Phenol

Final CERCLA RQ: 1000(454) pounds (Kilograms)

SARA 313 Emission Reporting

The following ingredients are listed:

Formaldehyde

0.1 %

Phenol

1.0 %

SARA (311/312) Hazard Categories

Chronic

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins



WARNING

This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Formaldehyde

Massachusetts "Right To Know" List

Formaldehyde

Carbon black

Phenol

Rhode Island "Right To Know" List

Formaldehyde

Carbon black

Phenol

Minnesota "Right To Know" List

Formaldehyde

Carbon black

Phenol

New Jersey "Right To Know" List

Formaldehyde

Carbon black

Phenol

Pennsylvania "Right To Know" List

Formaldehyde

Carbon black

Phenol

Inventories

US - TSCA

All the ingredients are listed or exempt.

16. Other information

Abbreviations and acronyms

CAS: Chemical Abstracts Service.

used in the safety data sheet IARC: International Agency for Research on Cancer.

IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.

NIOSH: The National Institute for Occupational Safety and Health.

OSHA: Occupational Safety and Health Administration. PBT: Persistent, Bioaccumulative and Toxic substance.

PEL: Permissible Exposure Limit.

SARA: Superfund Amendments and Reauthorization Act.

TLV: Threshold Limit Value.

TSCA: Toxic Substances Control Act.

USEPA: United States Environmental Protection Agency.

vPvB: Very Persistent and Very Bioaccumulative.

General information

All products manufactured by Knauf Insulation are made of non-classified fibers and are certified by EUCEB. Products meeting EUCEB certification requirements can be recognised

by the EUCEB logo printed on the packaging.

Further information can be obtained from:

www.euceb.org www.knaufinsulation.com

















Key literature references and sources for data

http://www.knaufinsulation.com/comfort-and-handling

Revision comments

Supersedes date 4/11/2019
Revision date 12/6/2019

 Revision
 3.3

 SDS No.
 4648

Hazard statements in full H301 Toxic if swallowed.

§1

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled. H331 Toxic if inhaled.

H335 May cause respiratory irritation. H341 Suspected of causing genetic defects.

H350 May cause cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Other information In 2001, the International Agency for Research on Cancer (IARC) reclassified glass mineral

wool fibres from Group 2B (possibly carcinogenic) to Group 3 «agent which cannot be

classified as for their carcinogenicity to humans». (See Monograph Vol 81,

http://monographs.iarc.fr/)

This Safety Data Sheet / Product Data Sheet does not constitute a workplace assessment. Information contained in this document represents the state of our knowledge regarding this product as of the date of issue of the document. Attention of users is drawn to possible risks taken when the product is used for other applications than the ones it has been designed for.