SAFETY DATA SHEET

1. Identification

Product identifier NovoRez 370 - Hardener/Side B

Other means of identification

SKU# NR370H
Recommended use Not available.
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Holcim Solutions and Products US, LLC 26 Century Boulevard, Suite 205 Nashville, Tennessee 37214 1-800-878-7876 •www.polyspec.com

Emergency phone numberCHEMTREC
800-424-9300
International
703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

Acute toxicity, dermal

Acute toxicity, inhalation

Category 4

Skin corrosion/irritation

Category 1

Serious eye damage/eye irritation

Category 1

Sensitization, skin

Category 1

Hazardous to the aquatic environment, acute

Environmental hazards Hazardous to the aquatic environment, acute

hazard

Hazardous to the aquatic environment, Category 3

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage.

May cause an allergic skin reaction. Causes serious eye damage. Harmful if inhaled. Harmful to

aquatic life with long lasting effects.

Precautionary statement

Prevention Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when

using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective

gloves/protective clothing/eye protection/face protection.

SDS US

If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all Response

contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if

you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. Take off

contaminated clothing and wash before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information 65.65% of the mixture consists of component(s) of unknown long-term hazards to the aquatic

> environment. 37.61% of the mixture consists of component(s) of unknown acute oral toxicity. 65.65% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 37.61% of the mixture consists of component(s) of unknown acute dermal toxicity.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|-----------------------------------|--------------------------|------------|---------|
| 1,3-Benzenedimethanamine | | 1477-55-0 | 10 - 30 |
| Quartz | | 14808-60-7 | 10 - 30 |
| Isophoronediamine | | 2855-13-2 | 5 - 10 |
| 4,4'-Isopropylidenediphenol | | 80-05-7 | 1 - 5 |
| Fibrous Glass | | 65997-17-3 | 1 - 5 |
| Other components below reportable | levels | | 30 - 60 |

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Remove contaminated clothing immediately and wash skin with soap and water. Chemical burns Skin contact must be treated by a physician. Get medical advice/attention if you feel unwell. In case of eczema

or other skin disorders: Seek medical attention and take along these instructions. Wash

contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If Ingestion

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important

symptoms/effects, acute and

delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result.

Indication of immediate medical attention and special

treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under

observation. Symptoms may be delayed.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to **General information** protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated

clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Foam. Powder. Carbon dioxide (CO2).

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

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials. Specific methods

Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

| Components | Туре | Value | |
|--|--------------|--------------|----------------------|
| Quartz (CAS 14808-60-7) | PEL | 0.05 mg/m3 | |
| US. OSHA Table Z-3 (29 CFR 1910. | 1000) | | |
| Components | Туре | Value | Form |
| Quartz (CAS 14808-60-7) | TWA | 0.1 mg/m3 | Respirable. |
| | | 2.4 mppcf | Respirable. |
| US. ACGIH Threshold Limit Values | • | | |
| Components | Туре | Value | Form |
| 1,3-Benzenedimethanamin e (CAS 1477-55-0) | Ceiling | 0.1 mg/m3 | |
| Quartz (CAS 14808-60-7) | TWA | 0.025 mg/m3 | Respirable fraction. |
| US. NIOSH: Pocket Guide to Chem | ical Hazards | | |
| Components | Туре | Value | Form |
| 1,3-Benzenedimethanamin e (CAS 1477-55-0) | Ceiling | 0.1 mg/m3 | |
| Fibrous Glass (CAS 65997-17-3) | TWA | 3 fibers/cm3 | Dust. |
| · | | 3 fibers/cm3 | Fiber. |
| | | 5 mg/m3 | fibers, total dust |
| | | 5 mg/m3 | Fiber, total |
| Quartz (CAS 14808-60-7) | TWA | 0.05 mg/m3 | Respirable dust. |
| Quartz (CAS 14000-00-7) | 1 4471 | 0.00 mg/mo | rioopii abio aaoti |

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Exposure guidelines

US - California OELs: Skin designation

1,3-Benzenedimethanamine (CAS 1477-55-0) Can be absorbed through the skin.

US - Tennessee OELs: Skin designation

1,3-Benzenedimethanamine (CAS 1477-55-0) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

1,3-Benzenedimethanamine (CAS 1477-55-0) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

1.3-Benzenedimethanamine (CAS 1477-55-0)

Can be absorbed through the skin.

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield. Face shield is

recommended.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Keep away from food and drink. 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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance Liquid.
Physical state Liquid.
Form Liquid.

Color Not available.

Odor Slight.

Odor thresholdNot available.pHNot available.Melting point/freezing pointNot available.Initial boiling point and boilingNot available.

range

Flash point > 250.0 °F (> 121.1 °C)

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

SDS US

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 12.25 lb/gal **Explosive properties** Not explosive.

Flammability class Combustible IIIB estimated

Oxidizing properties Not oxidizing.

Specific gravity 1.47

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Contact with incompatible materials.

Incompatible materials Alkaline metals. Peroxides. Phenols.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Harmful if inhaled.

Skin contact Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction.

Eye contact Causes serious eye damage.

Ingestion Causes digestive tract burns. Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result.

Information on toxicological effects

Acute toxicity Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed.

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

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Quartz (CAS 14808-60-7) 1 Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Quartz (CAS 14808-60-7) Known To Be Human Carcinogen.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

Not classified.

single exposure

Specific target organ toxicity - Not classified.

repeated exposure

Aspiration hazard Not an aspiration hazard.

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Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

4,4'-Isopropylidenediphenol 3.32

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

UN number UN3066

Paint, MARINE POLLUTANT **UN proper shipping name**

Transport hazard class(es)

Class 8 Subsidiary risk 8 Label(s) Packing group Ш **Environmental hazards**

> Marine pollutant Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions B52, IB3, T4, TP1, TP29

154 Packaging exceptions 173 Packaging non bulk Packaging bulk 241

IATA

UN3066 **UN number UN proper shipping name** Paint

Transport hazard class(es)

8 Class Subsidiary risk 8 Label(s) Ш Packing group **Environmental hazards** Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number

Paint, MARINE POLLUTANT **UN proper shipping name**

Transport hazard class(es) **Class** 8 Subsidiary risk 8 Label(s)

Material name: NovoRez 370 - Hardener/Side B

Packing group

Environmental hazards

Marine pollutant Yes

EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Ш

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and the IBC Code

_ _ _

DOT



IATA; IMDG



Marine pollutant



General information

IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

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

Not regulated.

TSCA Chemical Action Plans, Chemicals of Concern

4,4'-Isopropylidenediphenol (CAS 80-05-7) Bisphenol A Action Plan

CERCLA Hazardous Substance List (40 CFR 302.4)

4,4'-Isopropylidenediphenol (CAS 80-05-7) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

4,4'-Isopropylidenediphenol (CAS 80-05-7) % 1.0

Material name: NovoRez 370 - Hardener/Side B

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

4,4'-Isopropylidenediphenol (CAS 80-05-7)

Listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|-----------------------------|------------|----------|
| 4,4'-Isopropylidenediphenol | 80-05-7 | 2.5 - 10 |

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

4.4'-Isopropylidenediphenol (CAS 80-05-7)

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

WARNING: This product contains a chemical known to the State of California to cause cancer and

birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Benzene (CAS 71-43-2) Listed: February 27, 1987 Quartz (CAS 14808-60-7) Listed: October 1, 1988

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Benzene (CAS 71-43-2) Listed: December 26, 1997 Toluene (CAS 108-88-3) Listed: January 1, 1991 US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

4,4'-Isopropylidenediphenol (CAS 80-05-7) Listed: May 11, 2015 US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Benzene (CAS 71-43-2) Listed: December 26, 1997

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

4,4'-Isopropylidenediphenol (CAS 80-05-7)

Quartz (CAS 14808-60-7)

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

 Issue date
 11-25-2013

 Revision date
 11-24-2016

Version # 02

HMIS® ratings Health: 3

Flammability: 1 Physical hazard: 0

NFPA ratings Health: 3

Flammability: 1 Instability: 0

Disclaimer Holcim Solutions and Products US, LLC cannot anticipate all conditions under which this

information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience

currently available.

Revision informationThis document has undergone significant changes and should be reviewed in its entirety.

Material name: NovoRez 370 - Hardener/Side B