


Material Safety Data Sheet

1. Product and company identification

Product name	Neal Cast (NHC)
General chemical characteristics	Isocyanate terminated polyurethane resin
Analysis of noxiousness	Chronic exposure & contact may cause noxiousness
Usage	Designed for applying pressure on, fixing, and giving support to specific areas of the body suffering complete or simple (twists, sprains, or impaired ligaments) fractures
Supplier	A. Algeo Ltd Sheridan House, Bridge Ind. Est., Speke Hall Road, Liverpool L24 9HB Tel: +44 (0)151 448 1228 Fax: +44 (0)151 448 1008
Emergency phone number	Tel: +44 (0)151 448 1228
Issuing date	2006. 09. 06
Revision number and date	Revision number: 03 Date: 2013.07.22

2. Hazards identification

GHS classification	
. Health	1
. Fire	1
. Reactivity	0
Symbols	
Signal words	Warning
Hazard-Risk Statement	H312 Harmful in contact with skin H315 Cause skin irritation H317 May cause an allergic skin reaction H330 Fatal if inhaled H334 May cause allergy or asthma symptoms or breathing difficulties if Inhaled
Precautionary Statement	
. Prevention	P201 Obtain special instruction before use P202 Do not handle until all precautions have been read and understood. P262 Do not get in eyes, on skin, or on clothing.
. Response	P301+P310 IF SWALLOWED : immediately call a POISON CENTER or doctor/physician P302+P350 IF ON SKIN : Gently wash with plenty of soap and water P305+P351+P338 IF IN EYES : Rinse cautiously with water for several minute. Remove contact lenses, if present and eyes to do. Continue rinsing. P332+P313 If skin irritation or rash occur : Get medical advice/attention. P337+P313 If eye irritation persists : Get medical advice/attention.
. Storage	P402 Store in a dry place. P403 Store in a well-ventilated place. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F
. Disposal	P501 Dispose of contents/container to in accordance with local/national regulation

3. Composition/Information on ingredients

Name	Trade name/synonyms	Cas no or i.d no	Content(%)
Polyester fabric	-	-	50%
Polymer of diphenyl methane 4,4-diisocyanate & polyether polyol	NHR-1100 / Isocyanate prepolymer	-	50%

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4. First aid measures	
Eye contact	Wash eyes immediately with large amounts of water or normal saline, until no evidence of chemical remains.
Skin contact	(at least 15~20 minutes) get medical attention immediately Remove contaminated clothing and shoes immediately. If skin is intact gently remove excess polymer, and immediately flush with undiluted isopropyl alcohol, then with large amount of water. If the skin is irritated, use diluted isopropyl alcohol.
Inhalation	Perform artificial respiration if necessary. Keep person warm and at rest.
Ingestion	Treat symptomatically and supportively. If vomiting occurs, keep head lower than hips to help prevent aspiration. Treat symptomatically and supportively.
Note to physician	Get medical attention if needed. No specific antidote. Treat symptomatically and supportively.

5. Fire-Fighting measures	
Flash point	Over than 200°C
Autoignition	No data available
Lower/upper flammable limit	No data available
Flammable class	Osha : III b
Extinguishing media	Dry chemical, carbon dioxide, water spray or regular foam for larger fires, use water spray, fog or regular foam.
Fire fighting	Use agents suitable for type of surrounding fire. Avoid breathing hazardous vapors, keep upwind.
Hazardous combustion products	Thermal decomposition products may include highly toxic fumes of hydrogen cyanide, toxic oxide of carbon and nitrogen, and Hazardous isocyanates.

6. Accidental release measures	
Necessary points to protect human body	Keep unnecessary people away: Isolate hazard area and restrict entry.
Necessary points to protect ecology	Take up with sand or other absorbent material and place into containers for later disposal.
Defecation or remove	An decontamination solution is a mixture containing 20parts, isopropyl alcohol, 40parts concentrated ammonia, 2-5parts Household type detergent plus water to make 100 parts Soil spill: use cement powder or fly ash to absorb liquid mass

7. Handling and storage	
Handling	Observe all federal, state and local regulations when storing this substance. Store away from incompatible substances.
Storage	Keep container closed when not use and store in cool dry area.

8. Exposure controls & personal protection	
Engineering control	No information is available
Respiration protection	Self-contained breathing apparatus. Air purifying, full facepiece respirator. (gas mask) Supplied-air respirator.
Eye protection	Safety goggles
Hand protection	Appropriate protective gloves.
Body protection	Appropriate protective (impervious) clothing and equipment.
Cautions	Provide local exhaust or general dilution ventilation to meet published

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Max. Concentration	exposure limits. No data available
9. Physical and chemical properties	
Appearance	Light yellow liquid
Odor	A characteristic odor
PH	No data available
Water solubility	React
Boiling point	No data available
Melting point	Over than 10°C
Explosion	No data available
Oxidative	No data available
Vapor pressure	No data available
Specific gravity	1.12 (25°C)
Distribution	No data available
Vapor density	No data available
Viscosity	15,000±5,000(cps/30±1°C)
10. Stability and reactivity	
Chemical stability	Stable under normal temperatures and pressures.
Conditions to avoid	May burn but does not ignite readily. Avoid contact with strong oxidizers, excessive heat, sparks, or open flame.
Substances to avoid	Oxidizers (strong): fire and explosion hazard.
Hazardous decomposition	Thermal decomposition products may include highly toxic fumes of hydrogen toxic oxides of carbon and nitrogen, and hazardous isocyanate.
Polymerization	Hazardous polymerization has not been reported to occur under normal temperatures and pressures.
11. Toxicological information	
Influence to eye	Isocyanates may cause irritation with lacrimation and possibly conjunctivitis.
Influence to skin	Isocyanates may cause irritation with skin conditions ranging from Itching to widespread eczema. Allergic sensitization is possible, but only rarely.
Acute oral	No data available
Acute suction	No data available
Toxicity of generation	No data available
Chronic	No data available
12. Ecological information	
Ecotoxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in oil	No data available
Other adverse effects	No data available
13. Disposal considerations	
Waste disposal regulation	Observe all federal, state and local regulations when disposing of this substance.
Waste disposal method . Packing & core	Destroy the product by incineration
14. Transport information	
UN number	No data available
UN proper shipping name	Not applicable
Transport hazard class	Not applicable
Packing group(if applicable)	Not applicable
Marin pollution	No data available

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15. Regulatory information

Industrial Safety and Health Act	No data available
Toxic Chemical Control Act	No data available
Dangerous Material Safety Control Act	No data available
Waste Management Act	No data available
Other requirements in domestic and other countries	Not applicable

16. Other information

Information source and reference	Korea industrial safety cooperation, Mdl information system inc. Co. (u.s)
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