

MATERIAL SAFETY DATA SHEET

Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : NIKKALITE™ ELG 48000 Series
 Manufacture : NIPPON CARBIDE INDUSTRIES CO., INC.
 Address : Taiyo-Life Shinagawa Building, 22nd floor
 16-2, 2-Chome Konan, Minato-ku, Tokyo
 108-8466 JAPAN
 Telephone No. : +81-3-5462-8225, Fax No.+81-3-5462-8271
 Emergency Tel. No. : +81-3-5462-8206 (Retroreflective Materials Division)
 Email: reflective_sds@carbide.co.jp
 Recommended use Retroreflective Materials
 of the product and
 restrictions on use :

Section 2. HAZARDS IDENTIFICATION

GHS Classification

Physical hazards : No classification
 Health hazards : No classification
 Environmental hazards : No classification

GHS Label Elements

Symbols / Pictograms : Not applicable
 Signal word : Not applicable
 Hazard statement : Not applicable
 Precautionary statement : Not applicable

Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Percentage	CAS number	EINECS number
Polyester resin	3 ~ 8	—	—
Acrylic resin	12 ~ 20	—	—
Curing agent	2 ~ 3	—	—
Glass bead	20 ~ 30	65997-17-3	266-046-0
Aluminum	< 1	7429-90-5	231-072-3
Adhesive layer (acrylic resin)	8 ~ 14	—	—
Liner paper	35 ~ 45	—	—

Grade Number	Sheeting Color	Pigment	Percentage	CAS number
48012	White	No addition	—	—
48003	Black	Organic pigment Black	< 1	Commerce secret
48004	Yellow	Organic pigment Yellow	< 1	Commerce secret
48034	Lemmon Yellow	Organic pigment Yellow	< 1	Commerce secret
48005	Red	Organic pigment Red	< 1	Commerce secret
48025	Dark Red	Organic pigment Red	< 1	Commerce secret
48035	Ruby Red	Organic pigment Red	< 1	Commerce secret
48045	Violet	Organic pigment Violet	< 1	Commerce secret
48006	Blue	Organic pigment Blue	< 1	Commerce secret

Grade Number	Sheeting Color	Pigment	Percentage	CAS number
48026	Light Blue	Organic pigment Blue	< 1	Commerce secret
48036	Navy Blue	Organic pigment Blue	< 1	Commerce secret
48046	Sky Blue	Organic pigment Blue	< 1	Commerce secret
48077	Orange	Organic pigment Orange	< 1	Commerce secret
48008	Green	Organic pigment Green	< 1	Commerce secret
48018	Light Green	Organic pigment Green	< 1	Commerce secret
48010	Gold	Organic pigment Yellow	< 1	Commerce secret

Section 4. FIRST AID MEASURES

Not applicable.

Section 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media :

Carbon dioxide. Dry chemical. Foam. Water spray.

Fire-Fighting Equipment :

Wear full protective clothing, including helmet and face mask, self-contained, positive pressure or pressure demand breathing apparatus.

Section 6. ACCIDENTAL RELEASE MEASURES

Not applicable.

Section 7. HANDLING AND STORAGE

Precautions for Safety Storage :

Store in a cool place and keep dry. Store away from heat and direct sunshine.

Precautions for Safety Handling :

Handle under the normal usage

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

No special matters.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor :	Sheeting
pH :	Not applicable
Boiling point :	Not applicable
Melting point :	Not determined
Flash point :	Not determined
Ignition point :	Not determined
Vapor pressure :	Not applicable
Water Solubility :	Insoluble
Specific gravity :	1.2 ~ 1.5
Vapor density :	Not applicable
Evaporation rate :	Not applicable
Viscosity :	Not applicable

Section 10. STABILITY AND REACTIVITY

Stability : Stable under the normal conditions.
Hazardous Polymerization : Not occur.

Section 11. TOXICOLOGICAL INFORMATION

No special data are available.

Section 12. ECOLOGICAL INFORMATION

No specific data are available.
Since regulations vary, consult applicable regulations or authorities before disposal.

Section 13. DISPOSAL CONSIDERATIONS

Any disposal materials must be in compliance with local, state and federal laws and regulations.

Section 14. TRANSPORTATION INFORMATION

UN Number :	Not applicable
UN Class :	Not applicable
International restriction	
ADR / RID :	Not applicable
IMDG information :	Not applicable
Marine pollutant :	Not applicable
IATA information :	Not applicable

Any carton boxes must be confirmed damage.
Those boxes must be loaded up with no damage, no fall, no drop.

Section 15. REGULATORY INFORMATION

No special matters.

Section 16. OTHER INFORMATION

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

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