

Safety Data Sheet

CARBON BLACK

1. IDENTIFICATION OF SUBSTANCE / COMPANY INFORMATION

Chemical Name	Carbon black grades: N220, N330, N339, N550, N650, N660, N762, N774
Synonyms	Colloid carbon
CAS #	1333-86-4
Formula	C
Chemical Family	Carbon black
Supplier	SunBoss Chemicals Corp.
Address	8-110 West Beaver Creek Road Richmond Hill, ON L4B 1J9
Telephone	905-707-3433
Fax	905-707-7393

Emergency Information

After normal hours call Chemtrec at 1-800-424-9300

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Weight %</u>	<u>UN No.</u>
Carbon	1333-86-4	>97	215-609-9
	<u>Symbol(s)</u>	<u>Risk Phrase(s)</u>	
	None	None	

3. HEALTH HAZARDS INFORMATION

EMERGENCY OVERVIEW

IARC Listed: Group 2B (possible carcinogenic to humans)

Inhalation may cause irritation of the respiratory tract

High dust concentration may cause irritation to eyes.

May cause drying of the skin.

Potential Health Effects

Inhalation	May cause mechanical irritation of the upper respiratory tract and temporary discomfort as well as cough and laboured breathing.
Ingestion	No significant danger occurs when ingested.
Skin contact	Prolonged exposure may cause mechanical irritation, soiling and dry skin.
Eye Contact	High dust concentrations may cause irritation to the eyes.

4. EMERGENCY FIRST AID MEASURES

Inhalation	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical aid.
Ingestion	Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.
Skin	Remove contaminated clothing, wash skin with water, using soap. Launder clothing before reuse.
Eyes	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.
Note to Physician	Provide symptomatic/supportive care as necessary. Treatment based on sound judgment of physician and individual reactions of patient. Observe for signs of respiratory distress.

5. FIRE AND EXPLOSION HAZARD MEASURES

Flammability	Non-flammable
Flash Point	Not applicable
Flash Point Method	Not applicable
DOT Category	Not restricted
Extinguishing Media	Dry chemical foam, fine sprayed water or mist, carbon dioxide
Spontaneous Ignition Temperature	140 °C
Flammable Limits	Not applicable
Special Fire Fighting Procedures	Fight fire from a safe distance and from a protected location. Use water spray, foam or carbon dioxide to cool fire exposed surfaces. Do not allow run-off to enter waterways.
Special Protective Equipment	Fire fighters should wear full protective clothing, including self-contained breathing equipment.
Unusual Fire and Explosion Hazards	None

6. ACCIDENTAL RELEASE MEASURES

Procedures	Wear protective equipment specified.
Clean up Methods	Small spills should be vacuumed when possible. If necessary, light water spray will reduce dust for dry sweeping. Large spills should be shovelled into containers.

7. HANDLING AND STORAGE

Handling	Use local exhaust ventilation in working zones of intense dusting; use sealed systems for compounding as well as for product processing and conveying: vacuum carbon dust regularly. Prevent contact with open fire sources, sparks and high temperatures and strong oxidizers. Fine dust may cause electrical shorts and is capable of penetrating electrical equipment unless tightly sealed.
Storage	Store closed containers in a cool, dry, well-ventilated area. Store away from direct sunlight, heat and moisture. Electrical equipment in warehouse should be explosion proof. Store away from strong oxidizers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls	Avoid dust generation. Ensure good ventilation and local exhaustion of the working area as necessary to control any air contaminants to within their exposure limits during the use of this product. Eliminate ignition sources.
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Exposure Limits
Carbon

ACGIH TLV
3.5 mg/m³ (TWA)

OSHA PEL
3.5 mg/m³ (TWA)



Respiratory

Not required under normal operating conditions. Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure. Firefighting; use a Positive Pressure Demand Full Face Self Contained Breathing Apparatus. In emergency situations and during repair use, industrial filtering respirators and breathing masks should be worn.

Eyes

Wear safety glasses or goggles to protect against exposure.

Skin

Normal work coveralls. Launder contaminated clothing before reuse.

Gloves

Use gloves as a standard industrial handling procedure. All cleanable impervious glove types are acceptable.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Black hard substance
Odour	None
Specific Gravity	Not applicable
Density at 20 °C	0.7-2.1 g/cm ³
Bulk Density	Not applicable
Solubility in water	Insoluble in water

pH (50g/dm ³)	6-9
Other Solubility	None
Spontaneous Ignition temperature	140 °C
Minimum ignition temperature (VDI 2263)	
BAM FURNACE	>500 °C
GODBERT-GREENWALD FURNACE	>315 °C
Lower Exposure Limit (VDI 2263)	50 g/m ³
Dust Explosion Class	ST 1
Maximum Rate or Pressure Rise	30-100 bar/sec

10. STABILITY AND REACTIVITY

Chemical Stability	Stable when stored at room temperature in closed, original container. Stable under normal conditions of handling, use and transportation. Stable if protected from heat and exposure to air. Protect from moisture.
Conditions to avoid	High temperatures and open flame.
Incompatibility	Avoid strong oxidants, such as chlorates, bromates and nitrates.
Hazardous Polymerization	Will not occur
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide, oxides of sulphur form if heated above decomposition temperature (>300 °C).
Additional Guidelines	None

11. TOXICOLOGICAL INFORMATION

Acute oral LD 50 (mg/kg)	>8000 mg/kg (Rat)
Acute Dermal LD 50 (mg/kg)	Rabbit: non-irritative – index score 0.6/0.8 (4.0 = severe edema)
Acute Inhalation LC50 (mg/l)	Rat: inhalation, duration 90 days, NO AEL-1.0mg/m ³ (respirable)
Principle routes of Exposure	Inhalation, eyes, dermal
Ingestion	Is not considered a likely route of exposure.
Skin contact	Prolonged exposure may cause mechanical irritation and drying of the skin.
Inhalation	May cause irritation of the respiratory system when exposures are well above the occupational exposure limit. May produce a cough or laboured breathing.
Eye Contact	High dust concentrations may cause irritation to the eyes.
Aggravated Conditions	None

Carcinogenicity	IARC classified carbon black as Group 2B (possible carcinogenic to humans). NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, OSHA or the European Union.
Primary Irritation Effect	Not determined
Genotoxicity	Not determined
Reproductive/Developmental Toxicity	No effects have been reported in long-term animal studies.

12. ECOLOGICAL INFORMATION

Acute Fish Toxicity	LC50 (96 h) >1000 mg/l : Brachydanio rerio (zebra fish)
Acute Invertebrate Toxicity	EC50 (24h) >5600 mg/l : Daphnia Magna
Acute Algae Toxicity	EC50 (72h) >10,000 mg/l NOEC 50≥10,000 mg/l: Scenedesmus subspicatus
Activated Sludge	EC0 (3h) ≥ 800mg/l
Octonal/Water Coefficient	Not determined
Chemical Fate Information	Not determined
Other Information	Product does not pose a hazard to the environment

13. DISPOSAL CONSIDERATIONS

Waste Disposal	Waste should be collected. Bury in a licensed landfill or burn in an approved incinerator according to federal, state, and local regulations.
Contaminated Packaging	If empty container retains product residues, all label precautions must be observed. Transport with all closures in place. Return for reuse or dispose according to national or local regulations. Dispose of container according to national or local regulations.

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
TDG (Canada)	Not regulated

15. REGULATORY INFORMATION

CARBON BLACK IS NOT DEFINED AS A DANGEROUS SUBSTANCE OR PREPARATION ACCORDING TO THE COUNCIL DIRECTIVE 67/548/EEC AND ITS VARIOUS AMENDMENTS AND ADAPTATIONS.

Risk Phrase(s)	None
Safety Phrase(s)	None

FDA Status 21 CFR	Not determined
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TSCA	Listed
Canadian DSL	Listed
EINECS/ELINCS	Listed
US Regulations	
SARA Section 302	None
SARA 311/312 Hazard Categories	None
SARA 313 Chemical	None
RCRA Status	Not a RCRA waste

Canadian Regulations

WHMIS Hazard Class



D2A VERY TOXIC MATERIALS

NPRI Not available

16. HAZARD RATING SYSTEM

NFPA Rating (Scale 0-4)

- 0 - Minimal Hazard
- 1 - Slight Hazard
- 2 - Moderate Hazard
- 3 - Serious Hazard
- 4 - Severe Hazard

HEALTH	1
FIRE	1
REACTIVITY	0

HMIS Classification (Scale 0-4)

- 0 - Minimal Hazard
- 1 - Slight Hazard
- 2 - Moderate Hazard
- 3 - Serious Hazard
- 4 - Severe Hazard

HEALTH	0
FIRE	1
REACTIVITY	0

17. OTHER INFORMATION

Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. SunBoss Chemicals Corp. extends no warranty and assumes no responsibility for the accuracy or sufficiency of the content and expressly disclaims all liability for reliance thereon. This material safety data sheet provides guidelines for the safe handling of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required. It is the responsibility of the user to comply with all Federal, State and local laws and regulations. Individuals exposed to this product should read and understand this information and be provided pertinent training prior to working with this product.

Abbreviations and Acronyms

ACGIH: American Conference of Governmental Industrial Hygienists Inc.
CAS: Chemical Abstracts Service (Division of American Chemical Society)
DOT: Department of Transportation (USA)
EINECS: European Inventory of Existing Commercial Chemical Substances
HMIS: Hazardous Materials Identification System (USA)
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IMDG: International Marine Code for Dangerous Goods
LD50: Lethal Dose Medium
LC50: Lethal Concentration Medium
EC50: Effective Concentration Medium
NIOSH: National Institute for Occupational Safety and Health
NFPA: National Fire Protection Association (USA)
NPRI: National Pollutant Release Inventory (Canada)
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration (USA)
TDG: Transportation of Dangerous Goods (Canada)
TLV: Threshold Limit Value
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Information Systems (Canada)

18. REVISION DATE

Revision number: 3

Date of Issue: October 1, 2014

Changes: Number and format of headings changed; Updates to Sections 1: Identification of Substance - EC information added; 2: Health Hazards Information; 8: Specific Personal Protection Equipment - pictograms added; 14: Transport information - updated; 15: Regulatory information - EC information added; 16: Hazard Rating System - table added; 17: Abbreviations and Acronyms added