

VBX1448 BLACK NR

Version Number 1.3 Page 1 of 15 Revision Date 02/20/2015 Print Date 02/27/2015

SAFETY DATA SHEET

VBX1448 BLACK NR

Section 1. Identification

GHS product identifier : VBX1448 BLACK NR

Chemical name: MixtureCAS number: MixtureOther means of identification: FO00007745

Product type : solid

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications. Plastics.

Supplier's details : POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

1 (440) 930-1000 or 1 (866) POLYONE

Emergency telephone number (with hours of operation)

: CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

(with hours of operation) accider

Section 2. Hazards identification

This mixture has not been evaluated as a whole for health effects. All ingredients are bound in a PVC polymer matrix and potential for hazardous exposure as shipped is minimal. PVC resin is manufactured from Vinyl Chloride Monomer (VCM). PVC resin manufacturers take special efforts to strip residual VCM from their resins. Residual VCM in the resin is typically below 8.5 ppm. However, VCM is a known carcinogen. The end-user (fabricator) should take necessary precautions (mechanical ventilation, local exhaust, respiratory protection, etc.) to protect employees from exposure to any vapors or dusts that may be released during heating or fabrication. See Sections 8 and 11 for special precautions. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard

Communication Standard (29 CFR 1910.1200).

Classification of the substance or

mixture

COMBUSTIBLE DUSTS

CARCINOGENICITY - Category 2

Supplemental label elements : Keep container tightly closed.

Hazards not otherwise classified: Fine dust clouds may form explosive mixtures with air. Handling



VBX1448 BLACK NR

 Version Number 1.3
 Page 2 of 15

 Revision Date 02/20/2015
 Print Date 02/27/2015

and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

Substance/mixture: MixtureChemical name: MixtureOther means of identification: FO00007745

CAS number/other identifiers

Ingredient name	%	CAS number
Carbon black	0.1 - 1	1333-86-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.



VBX1448 BLACK NR

Version Number 1.3 Page 3 of 15 Revision Date 02/20/2015 Print Date 02/27/2015

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim

to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing

such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Exposure to airborne concentrations above statutory or recommended

exposure limits may cause irritation of the eyes.

Inhalation : Exposure to airborne concentrations above statutory or recommended

exposure limits may cause irritation of the nose, throat and lungs.

Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

irritation

redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact: No specific data.Ingestion: No specific data.

<u>Indication of immediate medical attention and special treatment</u> needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist

immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without

suitable training. It may be dangerous to the person providing aid to

give mouth-to-mouth resuscitation.

See toxicological information (Section 11)



VBX1448 BLACK NR

Version Number 1.3 Revision Date 02/20/2015 Page 4 of 15 Print Date 02/27/2015

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media Use dry chemical powder.Do not use water jet.

Specific hazards arising from the chemical

Fine dust clouds may form explosive mixtures with air.

Hazardous thermal decomposition products

May emit Hydrogen Chloride (HCl).

Decomposition products may include the following materials:

carbon dioxide carbon monoxide halogenated compounds

Special protective actions for firefighters Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and selfcontained breathing apparatus (SCBA) with a full face-piece operated

in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).



VBX1448 BLACK NR

Version Number 1.3 Revision Date 02/20/2015 Page 5 of 15 Print Date 02/27/2015

Methods and materials for containment and cleaning up

Small spill

Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.



VBX1448 BLACK NR

Version Number 1.3 Revision Date 02/20/2015 Page 6 of 15 Print Date 02/27/2015

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a well-ventilated place. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits	
Carbon black	OSHA PEL 1989 (1989-03-01)	
	PEL: Permissible Exposure Level 3.5 mg/m3	
	OSHA PEL (1993-06-30)	
	PEL: Permissible Exposure Level 3.5 mg/m3	
	NIOSH REL (1994-06-01)	
	Time Weighted Average (TWA) 3.5 mg/m3	
	Time Weighted Average (TWA)	
	ACGIH TLV (2010-12-06)	
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:	
	Permissible Exposure Level 3 mg/m3 Form: Inhalable fraction	

Appropriate engineering controls

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures



VBX1448 BLACK NR

 Version Number 1.3
 Page 7 of 15

 Revision Date 02/20/2015
 Print Date 02/27/2015

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical

products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety

showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used

when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced,

use dust goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved

standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves

cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based

on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures

should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this

product.

Respiratory protection : Use a properly fitted, particulate filter respirator complying with an

approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the

selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : solid [Powder.]
Color : BLACK



VBX1448 BLACK NR

Version Number 1.3 Page 8 of 15 Revision Date 02/20/2015 Print Date 02/27/2015

Odor Not available. **Odor threshold** Not available. Not available. pН **Melting point** Not available. **Boiling point** Not available. Flash point Not available. **Burning time** Not available. **Burning rate** Not available. Not available. **Evaporation rate** Flammability (solid, gas) Not available.

Lower and upper explosive : Lower: Not available. (flammable) limits : Upper: Not available.

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.SolubilityNot available.Solubility in waterNot available.Partition coefficient: n-Not available.

octanol/water

Auto-ignition temperature: Not available.Decomposition temperature: Not available.SADT: Not available.

Viscosity : Dynamic: Not available.

Kinematic: Not available.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or

its ingredients.

Chemical stability : Stable under recommended storage and handling conditions (see

Section 7).

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will

not occur.

Conditions to avoid : Avoid the creation of dust when handling and avoid all possible

sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers

and equipment before transferring material. Prevent dust

accumulation.

Incompatible materials : Avoid contact with acetal homopolymers and acetyl homopolymers

during processing.

Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition : Under normal conditions of storage and use, hazardous decomposition



VBX1448 BLACK NR

 Version Number 1.3
 Page 9 of 15

 Revision Date 02/20/2015
 Print Date 02/27/2015

products products should not be produced.

Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Carbon black				
	LD50 Oral	Rat	15,400 mg/kg	-

Conclusion/Summary : Mixture.Not fully tested.

Irritation/Corrosion

Conclusion/Summary

Skin:Mixture.Not fully tested.Eyes:Mixture.Not fully tested.Respiratory:Mixture.Not fully tested.

Sensitization

Conclusion/Summary

Skin: Mixture.Not fully tested.Respiratory: Mixture.Not fully tested.

Mutagenicity

Conclusion/Summary : Mixture.Not fully tested.

Carcinogenicity

Conclusion/Summary : Mixture.Not fully tested.

Classification

Product/ingredient	OSHA	IARC	NTP
name			
Carbon black		2B	

Reproductive toxicity

Conclusion/Summary : Mixture.Not fully tested.



VBX1448 BLACK NR

 Version Number 1.3
 Page 10 of 15

 Revision Date 02/20/2015
 Print Date 02/27/2015

Teratogenicity

Conclusion/Summary : Mixture.Not fully tested.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of :

exposure

Not available.

Potential acute health effects

Eye contact : Exposure to airborne concentrations above statutory or recommended

exposure limits may cause irritation of the eyes.

Inhalation : Exposure to airborne concentrations above statutory or recommended

exposure limits may cause irritation of the nose, throat and lungs.

Skin contact
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

irritation redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact: No specific data.Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure



VBX1448 BLACK NR

 Version Number 1.3
 Page 11 of 15

 Revision Date 02/20/2015
 Print Date 02/27/2015

Potential immediate effects: Not available.Potential delayed effects: Not available.

Potential chronic health effects

Conclusion/Summary : Mixture.Not fully tested.

General: Repeated or prolonged inhalation of dust may lead to chronic

respiratory irritation.

Carcinogenicity: Suspected of causing cancer. Risk of cancer depends on duration and

level of exposure.

Mutagenicity: No known significant effects or critical hazards.Teratogenicity: No known significant effects or critical hazards.Developmental effects: No known significant effects or critical hazards.Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Mobility in soil

Soil/water partition coefficient :

(KOC)

Other adverse effects : No known significant effects or critical hazards.

Not available.



VBX1448 BLACK NR

 Version Number 1.3
 Page 12 of 15

 Revision Date 02/20/2015
 Print Date 02/27/2015

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

Section 14. Transport information

U.S. DOT Classification : Not regulated for transportation.

ICAO/IATA : Consult mode specific transport rules

IMO/IMDG (maritime) : Consult mode specific transport rules

Section 15. Regulatory information

U.S. Federal regulations : United States - TSCA 12(b) - Chemical export notification: None

of the components are listed.

United States - TSCA 4(a) - Final Test Rules: Listed Diisononyl

phthalate

United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a)2 - Final significant new use rules: Not

isted

United States - TSCA 5(a)2 - Proposed significant new use rules:



VBX1448 BLACK NR

Version Number 1.3 Revision Date 02/20/2015

Page 13 of 15 Print Date 02/27/2015

Not listed

United States - TSCA 5(e) - Substances consent order: Not listed United States - TSCA 6 - Final risk management: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined

United States - TSCA 8(a) - Preliminary assessment report (**PAIR**): Not listed

United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed

United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Vinyl chloride monomer

United States - EPA Clean water act (CWA) section 311 -

Hazardous substances: Not listed

United States - EPA Clean air act (CAA) section 112 - Accidental

release prevention - Flammable substances: Not listed

United States - EPA Clean air act (CAA) section 112 - Accidental

release prevention - Toxic substances: Not listed

United States - Department of commerce - Precursor chemical:

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Clean Air Act Section 112(b)

Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I

Substances

Clean Air Act Section 602 Class II

Substances

DEA List I Chemicals (Precursor

Chemicals)

Chemicals)

DEA List II Chemicals (Essential

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Fire hazard Classification

Delayed (chronic) health hazard

Composition/information on ingredients



VBX1448 BLACK NR

Version Number 1.3 Page 14 of 15 Revision Date 02/20/2015 Print Date 02/27/2015

Name	%	Classification
Carbon black	0.1 - 1	СН

SARA 313

Not applicable.

State regulations

Massachusetts None of the components are listed. **New York** None of the components are listed. The following components are listed: **New Jersey** Ethene, chloro-, homopolymer

Carbon black

The following components are listed: Pennsylvania

Carbon black

California Prop. 65

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

United States inventory (TSCA 8b) All components are listed or exempted.

Canada inventory All components are listed or exempted.

International regulations

International lists Australia inventory (AICS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

Malaysia Inventory (EHS Register): Not determined. **EINECS:** All components are listed or exempted.

Japan inventory: Not determined.

China inventory (IECSC): All components are listed or exempted.

Korea inventory: All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components

are listed or exempted.

Philippines inventory (PICCS): All components are listed or

exempted.

Chemical Weapons Convention

List Schedule I Chemicals

Chemical Weapons Convention

List Schedule II Chemicals

Chemical Weapons Convention List Schedule III Chemicals

Not listed

Not listed

Not listed



VBX1448 BLACK NR

Version Number 1.3 Page 15 of 15 Revision Date 02/20/2015 Print Date 02/27/2015

Section 16. Other information

History

Date of printing: 02/27/2015Date of issue/Date of revision: 02/20/2015Date of previous issue: 12/11/2012

Version : 1.3

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of

Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine

pollution)

UN = United Nations

References : Not available.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes 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 that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.