SAFETY DATA SHEET Activator for Butyl Innerliner Sealer



Section 1. Identification

GHS product identifier	: Activator for Butyl Innerliner Sealer
Product code	: 16-239; 16-240
Product use	: Industrial use
Supplier's details	: Patch Rubber Company 100 Patch Rubber Road Weldon, NC 27890 USA T: (252) 536-2574
e-mail address of person responsible for this SDS	: roa-coa@patchrubber.com
Emergency telephone number (with hours of operation)	: CHEMTREC: United States and Canada :1-800-424-9300 CHEMTREC: Outside United States and Canada: 001-703-527-3887

Section 2. Hazards identification

This material is considered hazardous by the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200) and Health Canada Hazadous Product Regulations - WHMIS 2015

Classification of the substance or mixture	:	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4
		Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 10%
GHS label elements		
Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	1	Harmful if swallowed or if inhaled.
Precautionary statements		
Prevention	:	Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Response	:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.
Storage	1	Not applicable.
Disposal	1	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	:	None known.

Section 3. Composition/information on ingredients

Substance/mixture: MixtureOther means of
identification: Not available.

CAS number/other identifiers		
CAS number	:	Not applicable.
Product code	÷	16-239; 16-240

Ingredient name	%	CAS number
manganese dioxide	40 - 70	1313-13-9
terphenyl	1 - 5	26140-60-3

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 if irritation occurs. : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it Inhalation is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 adverse health effects persist or are severe. If necessary, call a poison center or physician. 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. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and Ingestion 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. If necessary, call a poison center or physician. 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	: May cause eye irritation.			
Inhalation	: Harmful if inhaled.			
Skin contact	: May cause skin irritation.			
Ingestion	: Harmful if swallowed.			
Over-exposure signs/symp	<u>itoms</u>			
Eye contact	: No specific data.			
Inhalation	: No specific data.			

Section 4. First aid measures

Skin contact	1	No specific data.	
Ingestion	1	No specific data.	
Indication of immediate med	dica	attention and special treatment needed, if necessary	
Notes to physician	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	
Specific treatments	1	No specific treatment.	
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.	

See toxicological information (Section 11)

Section 5. Fire-fighting measures

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Extinguishing media	
Suitable extinguishing media	: In case of fire, use water spray (fog), foam, dry chemical or CO ₂ .
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire, decomposition may produce toxic gases/fumes.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides
Special protective actions for fire-fighters	: 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. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	-	If specialized 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).

Methods and materials for containment and cleaning up

Small spill	: Stop leak if without risk. Move containers from spill area. Absorb with an inert material
	and place in an appropriate waste disposal container. Dispose of via a licensed waste
	disposal contractor.

Section 6. Accidental release measures

Large spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	1	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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. 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.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. 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. 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
United States Occupational Exposure	<u>Limits</u>	
manganese dioxide		OSHA PEL 1989 (United States, 3/1989). CEIL: 5 mg/m ³ , (as Mn) NIOSH REL (United States, 10/2013). TWA: 1 mg/m ³ , (as Mn) 10 hours. Form: Fume STEL: 3 mg/m ³ , (as Mn) 15 minutes. Form: Fume OSHA PEL (United States, 2/2013). CEIL: 5 mg/m ³ , (as Mn) ACGIH TLV (United States, 4/2014). TWA: 0.1 mg/m ³ , (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.02 mg/m ³ , (as Mn) 8 hours. Form: Respirable fraction
terphenyl		ACGIH TLV (United States, 4/2014). C: 0.53 ppm C: 5 mg/m ³ OSHA PEL 1989 (United States, 3/1989). CEIL: 0.5 ppm CEIL: 5 mg/m ³ OSHA PEL (United States, 2/2013). CEIL: 1 ppm
ate of issue/Date of revision : 01/27/2	2016 Date of previous issue	: No previous validation. Version : 1

Section 8. Exposure controls/personal protection

Canada Occupational Exposure Limits	
manganese dioxide terphenyl	 CA Quebec Provincial (Canada, 1/2014). TWAEV: 0.2 mg/m³, (as Mn) 8 hours. Form: Total dust. CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 0.2 mg/m³, (as Mn) 8 hours. CA British Columbia Provincial (Canada, 2/2015). TWA: 0.2 mg/m³, (as Mn) 8 hours. CA Ontario Provincial (Canada, 1/2013). TWA: 0.2 mg/m³, (as Mn) 8 hours. CA Alberta Provincial (Canada, 4/2009). C: 5 mg/m³ CA Alberta Provincial (Canada, 4/2009). C: 5 mg/m³ CA Ontario Provincial (Canada, 1/2013). C: 5 mg/m³ CA Ontario Provincial (Canada, 1/2013). C: 0.53 ppm C: 5 mg/m³ CA Quebec Provincial (Canada, 1/2014). STEV: 0.53 ppm 15 minutes. STEV: 5 mg/m³ 15 minutes.

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 meas	sures
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.
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.
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Section 8. Exposure controls/personal protection

Respiratory protection

: Use a properly fitted, air-purifying or air-fed 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. Ensure an MSHA/NIOSH-approved respirator or equivalent is used (applicable in the United States).

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	id.	
Color	ck. Brown.	
Odor	it odor.	
Odor threshold	available.	
рН	available.	
Melting point	available.	
Boiling point	available.	
Flash point	duct does not sustain combustion.	
Evaporation rate	available.	
Flammability (solid, gas)	available.	
Lower and upper explosive (flammable) limits	available.	
Vapor pressure	available.	
Vapor density	available.	
Relative density	6 [Water = 1]	
Solubility	available.	
Partition coefficient: n- octanol/water	available.	
Auto-ignition temperature	available.	
Decomposition temperature	available.	
Viscosity	available.	
Explosive properties	-explosive in the presence of the following m rks and static discharge.	aterials or conditions: open flames,

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	: Keep away from extreme heat and oxidizing agents. Prevent product contamination.
Incompatible materials	: oxidizing agents reducing agents
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
manganese dioxide	LD50 Oral	Rat	3478 mg/kg	-
	LD50 Subcutaneous	Mouse	422 mg/kg	-
	LDLo Intratracheal	Rat	50 mg/kg	-
	LDLo Intravenous	Rabbit	45 mg/kg	-
terphenyl	LD50 Oral	Rat	1400 mg/kg	-

Conclusion/Summary

: Harmful if swallowed or if inhaled.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

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 entry anticipated: Oral, Dermal, Inhalation, Ocular.
routes of exposure	

Potential acute health effects

Eye contact	: May cause eye irritation.
Inhalation	: Harmful if inhaled.
Skin contact	: May cause skin irritation.
Ingestion	: Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No specific data.
Inhalation	: No specific data.
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

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Section 11. Toxicological information

		-
Potential immediate effects	:	Not available.
Potential delayed effects	;	Not available.
<u>Long term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Repeated or prolonged exposure to the substance can produce nervous system damage.
Potential chronic health effe	ct	<u>S</u>
Not available.		
General	:	No known significant effects or critical hazards.
Carcinogenicity	;	No known significant effects or critical hazards.
Mutagenicity	;	No known significant effects or critical hazards.
Teratogenicity	1	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
/ louto	LOAIDILY	ootinnatoo

Route	ATE value
Oral	870.6 mg/kg
Inhalation (vapors)	19.64 mg/l

Section 12. Ecological information

<u>Toxicity</u>

Not available.

Conclusion/Summary : May cause long lasting harmful effects to aquatic life.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

coefficient (Koc)

Mobility in soilSoil/water partition: Not available.

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

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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 federal, state and 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	-					
	DOT Classification	TDG Classification	-	-	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	-	-	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Label						
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	-	-	Marine Pollutant: No	No.
Additional information	-	-	-	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations	:	TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): All components are listed or exempted.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	:	Listed
Clean Air Act Section 602 Class I Substances	:	Not listed
Clean Air Act Section 602 Class II Substances	:	Not listed

Date of issue/Date of revision

Section 15. Regulatory information

DEA List I Chemicals : Not listed (Precursor Chemicals)

DEA List II Chemicals : Not listed (Essential Chemicals)

<u>SARA 302/304</u>

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312 Classification

: Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive		Delayed (chronic) health hazard
manganese dioxide terphenyl		No. No.	-	No. No.	Yes. Yes.	No. No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	manganese dioxide	1313-13-9	≥69 - <75
Supplier notification	manganese dioxide	1313-13-9	≥69 - <75

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts	: The following components are listed: HYDROGENATED TERPHENYLS; TERPHENYLS
New York	: None of the components are listed.
New Jersey	 The following components are listed: HYDROGENATED TERPHENYLS; TERPHENYL, HYDROGENATED; TERPHENYLS (mixed isomers); TERPHENYL
Pennsylvania	: The following components are listed: MANGANESE COMPOUNDS; HYDROGENATED TERPHENYLS; TERPHENYLS

Canadian lists		
Canadian NPRI	:	The following components are listed: Manganese (and its compounds)
CEPA Toxic substances	:	None of the components are listed.
Canada inventory	:	All components are listed or exempted.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC) Not listed.

Section 15. Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists	
National inventory	
Australia	: 8All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Turkey	: Not determined.

Section 16. Other information

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Class	sification	Justification		
		Calculation method Calculation method		
<u>History</u>				
Date of printing	: 01/27/2016			
Date of issue/Date of revision	: 01/27/2016			
Date of previous issue	: 01/27/2016			
Version	: 1			
Key to abbreviations	BCF = Bioconcentration Fa GHS = Globally Harmonize IATA = International Air Tr IBC = Intermediate Bulk C IMDG = International Marit	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient		

Section 16. Other information

MARPOL = 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. ✓ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed 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.