

# SAFETY DATA SHEET

## SECTION 1 — IDENTIFICATION

### Product Identifier

Reviewed On 1/6/2020

**Trade Name:** MS Bond Activator

**CAS Number:** 7085-85-0

**EC Number:** 230-391-5

**Index Number:** 607-236-00-9

### Details of the supplier of the safety data sheet

#### Manufacturer / Supplier name and address:

**Murakami Screen USA**

745 Monterey Pass Road

Monterey Park, CA 91754

Phone Number: 800-562-3534

**Information Department:** *Product Safety Department*

**Emergency Telephone #:** INFOTRAC 1-800-535-5053

(For Chemical Emergency: Spill, Leak, Fire, Exposure or Accident)

IMPORTANT: Read this SDS before handling and disposing of this product. Pass this information on to employees, customers, and users of this product.

## SECTION 2 — HAZARD(S) IDENTIFICATION

### Classification of the substance or mixture.



GHS02 Flame  
Flam Liq. 2 H225 Highly  
flammable liquid and vapor.



GHS08 Health hazard  
STOT RE 2 H373 May  
cause damage to organs  
through prolonged or  
repeated exposure.



GHS07  
Eye Irrit. 2A H319 Causes  
serious eye irritation.  
STOT SE 3 H336 May  
cause drowsiness or  
dizziness.

### Label Elements

**GHS Label Elements:** *This product is classified and labeled according to the Globally Harmonized System*

### Hazard Pictograms:



GHS02



GHS07



GHS08

**Signal Word:** *Danger*

(Cont. on Page 2)

(Cont. from Page 1)

**Hazard-determining components of labeling:** acetone, N,N-dimethyl-p-toluidine

**Hazard Statements:**

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

**Precautionary Statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves/eye protection/face protection.

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a poison center/doctor if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P370+P378 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification System:**

**NFPA Ratings (scale 0-4)**



· HMIS-ratings (scale 0 - 4)

HEALTH	1	Health = 1
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

· Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

## SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical characterization: Mixtures

**Description:** Mixture or substances listed below with nonhazardous additions.

Dangerous Components:		
67-64-1	acetone	> 90%
99-97-8	N,N-dimethyl-p-toluidine	< 10%

## SECTION 4 — FIRST AID MEASURES

### Description of First Aid Measures

**General information:** Symptoms of poisoning may even occur after several hours: therefore medical observation for at least 48 hours.

**After Inhalation:** Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

**After Skin Contact:** Generally product does not irritate the skin.

**After Eye Contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

**After Swallowing:** Immediately call a doctor.

### Information for doctor:

**Most important symptoms and effects, both acute and delayed.** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed.** No further relevant information available.

## SECTION 5 — FIRE FIGHTING MEASURES

### Extinguishing media

**Suitable extinguishing agents:** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards arising from the substance or mixture:** No further relevant information available.

### Advice for firefighters

**Protective equipment:** Mouth respiratory protective device.

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Wear protective equipment. Keep unprotected persons away.

**Environmental precautions:** Dilute with plenty of water. For large spills: Do not allow to enter sewers/surface or ground water.

**Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

### Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## SECTION 7 — HANDLING & STORAGE

### Handling:

**Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

**Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.

Protect against electrostatic charge.

**Conditions for safe storage, including incompatibilities.**

### Storage:

**Requirements to be met by storerooms and receptacles:** Store in a cool location.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** Keep receptacle tightly sealed. Store in a cool, dry conditions in well sealed receptacles.

**Specific end use(s):** No further relevant information available.

## SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

**Additional information about design of technical systems:** No further data: see item 7.

### Control Parameters:

Components with limit values that require monitoring at the workplace:	
67-64-1	acetone

PEL	Long-term value: 2400 mg/m <sup>3</sup> , 1000 ppm
REL	Long-term value: 590 mg/m <sup>3</sup> , 250ppm
TVL	Short-term value: (1782) NIC-1187 mg/m <sup>3</sup> , (750) NIC-500 ppm
	Long-term value: (1188) NIC-594 mg/m <sup>3</sup> , (NIC-250 ppm
	BEI

99-97-8 N,N-dimethyl-p-toluidine	
WEEL	Long-term value: 0.5 ppm

Ingredients with biological limit values:	
67-64-1	acetone

BEI	50 mg/l Medium urine Time: end of shift Parameter: Acetone (nonspecific)
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**Additional information:** The lists that were valid during the creation were used as basis.

### Exposure Controls

#### Personal Protective Equipment:

**General Protective and Hygienic Measures:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with eyes and skin.

**Breathing Equipment:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

(Cont. on Page 5)

(Cont. from Page 4)

#### Protection of hands:



*Protective Gloves*

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

#### Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material:** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Goggles recommended during refilling.



*Tightly sealed goggles*

## SECTION 9 — PHYSICAL & CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

#### General Information

##### Appearance:

**Form:**

Fluid

**Color:**

According to product specification.

**Odor:**

Characteristic

**Odor threshold:**

Not determined

**pH value:**

Not determined

##### Change in condition

**Melting Point/ Melting Range:**

-94.7 °C (-138 °F)

**Boiling Point/ Boiling Range:**

55 °C (131 °F)

**Flash Point:**

-17 °C (1 °F)

**Flammability (solid, gaseous):**

Not applicable

**Ignition temperature:**

465 °C (896 °F)

**Decomposition temperature:**

Not determined

**Auto igniting:**

Product is not selfigniting.

**Danger of explosion:**

Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

##### Explosion limits:

**Lower:**

2.6 Vol %

**Upper:**

13 Vol %

**Vapor pressure at 20°C (68°F):**

233 hPa (175 mm Hg)

**Density at 20°C (68°F):**

1.079345 g/cm<sup>3</sup> (6.621 lbs/gal)

**Relative density:**

Not determined

**Vapor density :**

Not determined

**Evaporation rate**

Not determined

(Cont. from Page 5)

**Solubility in/Miscibility with**

**Water:**

Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):**

Not determined

**Viscosity:**

Not determined

**Dynamic:**

Not determined

**Kinematic:**

Not determined

**Organic solvents:**

0.0%

**Other information**

No further information available.

## SECTION 10— STABILITY & REACTIVITY

**Reactivity:** No further relevant information available.

**Chemical Stability**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions:** No dangerous reactions known.

**Conditions to avoid:** No further relevant information available.

**Incompatible materials:** No further relevant information.

**Hazardous decomposition products:** No dangerous decomposition products known.

## SECTION 11— TOXICOLOGICAL INFORMATION

**Information on toxicological effects**

**Acute toxicity:**

**LD/LC50 values that are relevant for classification:**

**67-64-1 acetone**

<i>Oral</i>	<i>LD50</i>	<i>5800 mg/kg (rat)</i>
<i>Dermal</i>	<i>LD50</i>	<i>20000 mg/kg (rabbit)</i>

**Primary irritant effect:**

**on the skin:** No irritant effect.

**on the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

**Carcinogenic categories**

**IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

**NTP (National Toxicology Program)**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## SECTION 12— ECOLOGICAL INFORMATION

### Toxicity

#### Aquatic toxicity:

No further relevant information available.

#### Persistence and degradability:

No further relevant information available.

#### Behavior in environmental systems:

#### Bioaccumulative potential:

No further relevant information available.

#### Mobility in soil:

No further relevant information available.

#### Additional ecological information:

#### General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### Results of PBT and vPvB assessment

#### PBT:

Not applicable

#### vPvB:

Not applicable

#### Other adverse effects:

No further relevant information available.

## SECTION 13— DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations.

#### Uncleaned packagings:

#### Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations.

#### Recommended cleansing agent:

Water, if necessary with cleansing agents.

## SECTION 14 — TRANSPORT INFORMATION

### UN-Number

#### DOT, IMDG, IATA

UN1993

#### UN proper shipping name

#### DOT

Flammable liquids, n.o.s. (Acetone)

#### IMDG, IATA

FLAMMABLE LIQUIDS, N.O.S. (ACETONE)

#### Transport hazard class(es)

#### DOT



#### Class

#### Label

3 Flammable liquids

3

#### IMDG, IATA



#### Class

#### Label

3 Flammable liquids

3

(Cont. on Page 8)

<b>Packaging group</b>	11
<b>DOT, IMDG, IATA</b>	
<b>Environmental hazards:</b>	
<b>Marine Polutant:</b>	no
<b>Special precautions for user</b>	Warning Flammable liquids
<b>Danger code (Kemler):</b>	33
<b>EMS Number:</b>	F-E, <u>S</u> -E
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	not applicable
<b>Transport/Additional Information:</b>	
<b>DOT</b>	
<b>Quantity limitations</b>	On passenger aircraft/rail: 5 L On cargo aircraft only 60 L
<b>IMDG</b>	
<b>Limited quantities (LQ)</b>	IL
<b>Expected quantities (EQ)</b>	Code: E2 Maximum net per quantity per inner packaging: 30 ml Maximum net quantity per outer packaing: 500 ml
<b>UN “Model Regulation”:</b>	UN1993, Flammable liquids, n.o.s. (Acetone), 3, II

## SECTION 15 — REGULATORY INFORMATION

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
  - **Section 355 (extremely hazardous substances):**  
Substance is not listed.
  - **Section 313 (Specific toxic chemical listings):**  
Substance is not listed.
  - **TSCA (Toxic Substances Control Act):**  
Substance is listed.
  - **Proposition 65**
  - **Chemicals known to cause cancer:**  
Substance is not listed.
  - **Chemicals known to cause reproductive toxicity:**  
Substance is not listed.
  - **Chemicals known to cause developmental toxicity:**  
Substance is not listed.
  - **Carcinogeny categories**
  - **EPA (Environmental Protection Agency)**  
Substance is not listed.
  - **TLV (Threshold Limit Value established by ACGIH)**  
Substance is not listed.
  - **NIOSH-Ca (National Institute for Occupational Safety and Health)**  
Substance is not listed.
- GHS label elements:** The product is classified and labeled according to the Globally Harmonized System (GHS)
- Hazard pictograms:**



GHS07

**Signal word:** Warning  
(Cont. on Page 9)



## SECTION 15 — REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

**Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

**TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**Proposition 65**

**Chemicals known to cause cancer:**

99-97-8 | N,N-dimethyl-p-toluidine

**Chemicals known to cause reproductive toxicity:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients listed.

**Carcinogenicity categories**

EPA (Environmental Protection Agency)		
67-64-1	acetone	1
TLV (Threshold Limit Value established by ACGIH)		
67-64-1	acetone	A4
NIOSH-Ca (National Institute for Occupational Safety and Health)		
None of the ingredients is listed		

**GHS label elements:** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**



GHS02



GHS07



GHS08

**Signal word:** Danger

**Hazard-determining components of labeling:**

acetone

N,N-dimethyl-p-toluidine

**Hazard statements:**

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

**Precautionary Statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

(Cont. on Page 10)

**Precautionary statements:**

P280 Wear protective gloves/ eye protection/ face protection.

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a poison center/doctor if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P370+P378 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/international regulations.

***Chemical safety assesment: A Chemical Safety Assesment has not been carried out.***

## SECTION 16— OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing SDS:** Environmental Protection Agency

**Contact:** H.S.D

**Prepared For:** Murakami Screen USA Inc.

**Telephone number:** 323-980-0662

**Date Revised:** 11/26/2019

**Abbreviations and acronyms:**

ADR: Accord europeen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transportation Association

ACGIH: American conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LC50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2