SAFETY DATA SHEETS

This SDS packet was issued with item: 075218326

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

075219456 075219464 075219472 075219480 075229703 075229711 075229729 075229737 075229745



Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 05/07/2012

Reviewed on 04/01/2012

	cation of the substance/mixture and of the company/undertaking	
· Product i	identifier	
· Trade na	ame: ALLOY PRIMER	
	umber: US054 ion of the substance / the preparation Adhesive, dental metal	
 Manufact Kuraray N 1621 Saka Japan Contact in Kuraray A 33 Maider NY 10038 Tel: 800-8 Fax: 888-7 	Noritake Dental Inc. azu, Kurashiki, Okayama 710-0801, information: America, Inc. en Lane, 6th Floor, New York, 8 U.S.A. 879-1676	
2 Compos	sition/information on ingredients	
Description Dangerou 67-64-1 a Other ing 6-(4-Viny)		90%
	ls identification ation of the substance or mixture	
	GHS02 Flame	
H225 H	Highly flammable liquid and vapour.	
	GHS07	
H319 C	Causes serious eye irritation.	
	May cause drowsiness or dizziness.	
· Classifica	ation according to Directive 67/548/EEC or Directive 1999/45/EC	
• Classifica	ation according to Directive 67/548/EEC or Directive 1999/45/EC	
Classifica	ation according to Directive 67/548/EEC or Directive 1999/45/EC ant to eyes.	
• Classifica Irrita Irritating t	ation according to Directive 67/548/EEC or Directive 1999/45/EC ant to eyes. hly flammable	
 Classifica Irrita Irritating t High Highly fla Vapours n Informati The produ 	ation according to Directive 67/548/EEC or Directive 1999/45/EC ant to eyes. hly flammable	
 Classifica Irritating t Irritating t High Highly fla Vapours n Informati The produ Classifica The classif 	ation according to Directive 67/548/EEC or Directive 1999/45/EC ant to eyes. hly flammable ammable. may cause drowsiness and dizziness. tion concerning particular hazards for human and environment: uct has to be labelled due to the calculation procedure of international guidelines.	



Material Safety Data Sheet acc. to ISO/DIS 11014

Reviewed on 04/01/2012

Trade name: ALLOY PRIMER

	(Contd. of page 1)
Label elem	ents
GHS label	elements
The product	t is classified and labelled according to the Globally Harmonized System (GHS).
· Hazard pic	tograms GHS02, GHS07
Signal wore	d Danger
Hazard sta	tements
H225 Highl	y flammable liquid and vapour.
H319 Cause	es serious eye irritation.
H336 May o	cause drowsiness or dizziness.
Precaution	ary statements
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
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.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international
	regulations.
Classificati	
NFPA ratir	ngs (scale 0 - 4)
	Health = 1
3	Fire = 3
	Reactivity $= 0$
HMIS-ratio	ngs (scale 0 - 4)
HEALTH	1 Health $= 1$
FIRE	3 Fire = 3
	0 Reactivity $= 0$

4 First aid measures

· After inhalation:

Supply fresh air and to be sure call for a doctor.

- In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing:
- Do not induce vomiting; immediately call for medical help.
- If symptoms persist consult doctor.

5 Firefighting measures

- Suitable extinguishing agents:
- CO2, 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.
- Protective equipment:
- Wear self-contained respiatory protective device. Wear fully protective suit.

(Contd. on page 3)

US/



Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 05/07/2012

Trade name: ALLOY PRIMER

(Contd. of page 2)

Reviewed on 04/01/2012

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.
- 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). 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.

7 Handling and 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 charges.
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location (2-25°C).

• **Information about storage in one common storage facility:** Store away from oxidizing agents.

- Store away from reducing agents.
- Further information about storage conditions: Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight.
- \cdot Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

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

· Components with limit values that require monitoring at the workplace:

67-64-1 acetone

- PEL 2400 mg/m³, 1000 ppm
- REL 590 mg/m³, 250 ppm
- TLV Short-term value: 1782 mg/m³, 750 ppm
 - Long-term value: 1188 mg/m³, 500 ppm BEI

 \cdot Additional information: The lists that were valid during the creation were used as basis.

- · Personal protective equipment:
- · General protective and hygienic measures:
- Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- Avoid contact with the eyes.
- Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.

(Contd. on page 4)



Material Safety Data Sheet acc. to ISO/DIS 11014

Reviewed on 04/01/2012

Trade name: ALLOY PRIMER

(Contd. of page 3)

· Protection of hands:

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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

Physical and chemical propert	
General Information	
Appearance:	
Form:	Liquid
Color:	Transparent
Odor:	Acetone-like
pH-value:	Not applicable
Change in condition	
Melting point/Melting range:	94.7 °C (acetone)
Boiling point/Boiling range:	55°C (131 °F) (acetone)
Flash point:	-19°C (-2 °F) (acetone)
Ignition temperature:	465.0°C (869 °F) (acetone)
Danger of explosion:	Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.
Explosion limits:	
Lower:	2.6 Vol % (acetone)
Upper:	13.0 Vol % (acetone)
Vapor pressure at 20°C (68 °F):	233.0 hPa (175 mm Hg) (acetone)
Density:	0.79 g/cm ³ (acetone)
Vapour density	2.0 g/cm^3 (acetone, air=1)
Solubility in / Miscibility with	
Water:	Partly miscible.
Segregation coefficient (n-octonol/wa	
VOC content:	99.0 %
Other information	No further relevant information available.

(Contd. on page 5)



Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 05/07/2012

Reviewed on 04/01/2012

Trade name: ALLOY PRIMER

(Contd. of page 4)

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
- No decomposition if used and stored according to specifications.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

67-64-1 acetone

Oral LD50 5800 mg/kg (rat)

Dermal LD50 20000 mg/kg (rabbit)

- · Primary irritant effect:
- on the skin: No irritant effect.
- \cdot 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:

Irritant

12 Ecological information

- Aquatic toxicity: No further relevant information available.
- \cdot Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential 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.

13 Disposal considerations

· Waste treatment methods

- · Recommendation:
- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packagings:
- \cdot **Recommendation:** Disposal must be made according to official regulations.
- \cdot Recommended cleansing agent: Water, if necessary with cleansing agents.

UN1090	
1090	
1090 ACETONE, solution	
	(Contd. on page
	1090



Material Safety Data Sheet acc. to ISO/DIS 11014

Reviewed on 04/01/2012

Trade name: ALLOY PRIMER

	(Contd. of page 5)
· IMDG, IATA	ACETONE, solution
· Transport hazard class(es)	
· DOT, IMDG, IATA	
P MARKE COD	
· Class	3 Flammable liquids.
·Label	3
· Class	3 Flammable liquids
· Label	3
· Packing group · DOT, ADR, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	No
\cdot Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D
• Transport in bulk according to Annex MARPOL73/78 and the IBC Code	x II of Not applicable.
· UN "Model Regulation":	UN1090; ACETONE, solution; 3; II

15 Regulatory information

Section 355 (extremely hazardous substances):	
None of the ingredient 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:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	



Trade name: ALLOY PRIMER

	(Contd. of page
· Cancerogenity categories	
· EPA (Environmental Protection Agency)	
67-64-1 acetone	Ι
· IARC (International Agency for Research on Cancer)	
None of the ingredients is listed.	
· TLV (Threshold Limit Value established by ACGIH)	
67-64-1 acetone	A4
\cdot NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administation)	
None of the ingredients is listed.	
· GHS label elements Not determined	

Material Safety Data Sheet acc. to ISO/DIS 11014

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.

- · Version: 4
- · Relevant phrases
- Not applicable
- H225 Highly flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.



Safety Data Sheet acc. to OSHA HCS

Printing date 05/01/2016

Reviewed on 05/01/2016

1 Identification of the substance/mixture and of the company/undertaking
· Product identifier
· Trade name: ALLOY PRIMER
• Article number: US054 • Application of the substance / the preparation Adhesive, dental metal
 Details of the supplier of the safety data sheet Manufacturer: Kuraray Noritake Dental Inc. 1621 Sakazu, Kurashiki, Okayama 710-0801, Japan Contact information: Kuraray America, Inc. 33 Maiden Lane, 6th Floor, New York, NY 10038 U.S.A. Tel: 800-879-1676 Fax: 888-700-5200 Website: www.kuraraydental.com
2 Composition/information on ingredients
 Chemical characterization: Mixtures Description: Mixture of substances listed below with nonhazardous additions. Dangerous components: 67-64-1 acetone Other ingredients: 6-(4-Vinylbenzyl-N-propyl)amino-1,3,5-triazine-2,4-dithione 10-Methacryloyloxydecyl dihydrogen phosphate
3 Hazards identification • Classification of the substance or mixture GHS02 Flame
H225 Highly flammable liquid and vapour. GHS07
 H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. Classification according to Directive 67/548/EEC or Directive 1999/45/EC Irritant Irritant Irritating to eyes.
Highly flammable Highly flammable. Vapours may cause drowsiness and dizziness.
 Information concerning particular hazards for human and environment: The product has to be labelled due to the calculation procedure of international guidelines. Classification system: The classification was made according to the latest editions of international substances lists, and expanded
upon from company and literature data. (Contd. on page 2)



Safety Data Sheet acc. to OSHA HCS

Reviewed on 05/01/2016

Trade name: ALLOY PRIMER

	(Contd. of page 1)
· Label eleme	ents
· GHS label e	lements
The product	is classified and labelled according to the Globally Harmonized System (GHS).
· Hazard pict	ograms GHS02, GHS07
 Signal word 	Danger
· Hazard stat	ements
	/ flammable liquid and vapour.
	s serious eye irritation.
	ause drowsiness or dizziness.
	ary statements
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
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.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international
1001	regulations.
Classificatio	
	gs (scale 0 - 4)
	Health = 1
	Fire = 3
	Reactivity $= 0$
HMIS-ratin	ngs (scale 0 - 4)
HEALTH	1 Health = 1
	3 Fire = 3
REACTIVITY	Reactivity = 0

4 First aid measures

· After inhalation:

Supply fresh air and to be sure call for a doctor.

- In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing:
- Do not induce vomiting; immediately call for medical help.
- If symptoms persist consult doctor.

5 Firefighting measures

· Suitable extinguishing agents:

CO2, 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.
- Protective equipment:
- Wear self-contained respiatory protective device. Wear fully protective suit.

(Contd. on page 3)

US/



Trade name: ALLOY PRIMER

Reviewed on 05/01/2016

(Contd. of page 2)

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.
- 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). Ensure adequate ventilation.

Safety Data Sheet acc. to OSHA HCS

- **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.

7 Handling and 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 charges.
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location (2-25°C).

• **Information about storage in one common storage facility:** Store away from oxidizing agents.

- Store away from reducing agents.
- Further information about storage conditions: Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

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

Components with limit values that require monitoring at the workplace: 67-64-1 acetone PEL 2400 mg/m³, 1000 ppm REL 590 mg/m³, 250 ppm TLV Short-term value: 1782 mg/m³, 750 ppm Long-term value: 1188 mg/m³, 500 ppm BEI Additional information: The lists that were valid during the creation were used as basis.

- · Personal protective equipment:
- · General protective and hygienic measures:
- Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- Avoid contact with the eyes.
- Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.

(Contd. on page 4)



Trade name: ALLOY PRIMER

(Contd. of page 3)

Reviewed on 05/01/2016

· Protection of hands:

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.

Safety Data Sheet acc. to OSHA HCS

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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles

General Information	
Appearance:	
Form:	Liquid
Color:	Transparent
Odor:	Acetone-like
pH-value:	Not applicable
Change in condition	
Melting point/Melting range:	94.7 °C (acetone)
Boiling point/Boiling range:	55°C (131 °F) (acetone)
Flash point:	-19°C (-2 °F) (acetone)
Ignition temperature:	465.0°C (869 °F) (acetone)
Danger of explosion:	Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.
Explosion limits:	
Lower:	2.6 Vol % (acetone)
Upper:	13.0 Vol % (acetone)
Vapor pressure at 20°C (68 °F):	233.0 hPa (175 mm Hg) (acetone)
Density:	0.79 g/cm ³ (acetone)
Vapour density	2.0 g/cm ³ (acetone, air=1)
Solubility in / Miscibility with	
Water:	Partly miscible.
Segregation coefficient (n-octonol/wa	ter): -0.24 (acetone)
VOC content:	99.0 %
Other information	No further relevant information available.

(Contd. on page 5)



Safety Data Sheet acc. to OSHA HCS

Reviewed on 05/01/2016

Trade name: ALLOY PRIMER

(Contd. of page 4)

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
- No decomposition if used and stored according to specifications.
- Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

67-64-1 acetone

Oral LD50 5800 mg/kg (rat)

Dermal LD50 20000 mg/kg (rabbit)

- 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:

Irritant

12 Ecological information

- Aquatic toxicity: No further relevant information available.
- \cdot Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential 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.

13 Disposal considerations

· Waste treatment methods

- Recommendation:
 - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packagings:
- \cdot **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

4 Transport information		
· UN-Number		
· DOT	UN1090	
· ADR, IMDG, IATA	1090	
· UN proper shipping name		
· ADR	1090 ACETONE, solution	



Safety Data Sheet acc. to OSHA HCS

Reviewed on 05/01/2016

Trade name: ALLOY PRIMER

	(Contd. of page 5)
· IMDG, IATA	ACETONE, solution
· Transport hazard class(es)	
· DOT, IMDG, IATA	
FIAMULE COT	
· Class	3 Flammable liquids.
· Label	3
· Class	3 Flammable liquids
· Label	3
· Packing group · DOT, ADR, IMDG, IATA	П
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D
• Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
	UN1090; ACETONE, solution; 3; II

15 Regulatory information

Section 355 (extremely hazardous substances):	
None of the ingredient 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:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	



Reviewed on 05/01/2016

Trade name: ALLOY PRIMER

	(Contd. of page
· Cancerogenity categories	
· EPA (Environmental Protection Agency)	
67-64-1 acetone	
· IARC (International Agency for Research on Cancer)	
None of the ingredients is listed.	
· TLV (Threshold Limit Value established by ACGIH)	
67-64-1 acetone	A
NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administation)	
None of the ingredients is listed.	
GHS label elements Not determined	

Safety Data Sheet acc. to OSHA HCS

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.

- · Version: 4
- · Relevant phrases
- Not applicable
- H225 Highly flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.