

SAFETY DATA SHEET

Date Printed : 3 March 2014
Date Updated : 3 March 2014
Version : Rev. (00)
Regulation : In accordance with Regulation (EU) 453/2010 (REACH), Annex II

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MITURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Name of the Product : AMOS Glitter Glue Classic

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

Relevant identified uses : For the purpose of decoration on the paper

Uses advised against : Use for recommended use only.

1.3 Details of the supplier of the Safety Data Sheet

Company name : AMOS CORPORATION., .

Address : 2F. CHOYANG B/L #113, KANGNAM-KU 135-090, SEOUL KOREA

Contact Telephone : +82-2-3452-0133

Fax : +82-2-3452-0277

Email Address : sjshim@amoskorea.co.kr

1.4. Emergency Telephone : +82-2-3452-0133

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

AMOS Glitter Glue Classic is not classified according to Regulation (EC) No 1272/2008 [CLP] and Directive 1999/45/EC.

2.2 Label elements

Hazard pictograms : Not applicable

Signal word : Not applicable

Hazard statements : Not applicable

Additional precautionary statements : Not applicable

2.3 Other hazards : No information available

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Description of the mixture :

Mixture of, 2-Pyrrolidinone, 1-ethenyl-, homopolymer, Water, 1,2-Propanediol, 3(2H)-Isothiazolone, 5-chloro-2-methyl-, Poly(oxy-1,2-ethanedioxydicarbonyl-1,4-phenylenecarbonyl), Xanthan gum, Polyacrylic acid, Triethanolamine, dyestuff

Hazard ingredients :

Chemical Name	Common Name (Synonyms)	CAS number	EC number	Content (%)	Classification according to 67/548/EEC	Classification according to Regulation (EC) No 1278/2008 (CLP).
2-Pyrrolidinone, 1-ethenyl-, homopolymer	POLY VINYL PYRROLIDONE	9003-39-8	Not applicable	5.0~7.0	Not applicable	See Section15
Water	WATER	7732-18-5	231-791-2	82.0~85.0	Not applicable	See Section15
1,2-Propanediol	PROPYLENE GLYCOL	57-55-6	200-338-0	0.5~1.5	Not applicable	See Section15

Xanthan gum	XANTHAN GUM	11138-16-2	234-394-2	0.3~0.4	Not applicable	See Section15
Polyacrylic acid	POLYACRYLIC ACID	9003-01-4	Not applicable	0.3~0.4	Not applicable	See Section15
Triethanolamine	TRIETHANOLAMINE	102-71-6	203-049-8	0.4~0.5	Not applicable	See Section15
Poly(oxy-1,2-ethanediylloxycarbonyl-1,4-phenylenecarbonyl)	POLYETHYLENE TEREPHTHALATE	25038-59-9	Not applicable	7.0~9.0	Not applicable	See Section15
3(2H)-Isothiazolone, 5-chloro-2-methyl-	5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE	26172-55-4	247-500-7	0.0008~0.001	Not applicable	See Section15
Dyestuff	DYESTUFF	Confidential	Not applicable	0.04~0.08	Not applicable	See Section15

SECTION 4. FIRST-AID MEASURES

4.1 Description of first aid measures

After eye contact : - In case of contact with substance, immediately flush eyes with running water at least 20 minutes.

After skin contact : - In case of contact with substance, immediately flush skin with running water at least 20 minutes.

- Remove and isolate contaminated clothing and shoes.

- Wash contaminated clothing and shoes before reuse.

- Get immediate medical advice/attention.

After inhalation : - Specific medical treatment is urgent.

- Move victim to fresh air.

- Give artificial respiration if victim is not breathing.

- Administer oxygen if breathing is difficult.

After ingestion : - Do not let him/her eat anything, if unconscious.

- Get immediate medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed.

Acute effects

None known.

Delayed effects

None known.

4.3 Indication of any immediate medical attention and special treatment needed

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media :

- Dry sand,
- Dry chemical
- Alcohol-resistant foam
- water spray
- Regular foam
- CO2

Unsuitable Extinguishing Media : -High pressure water streams

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products :

- May be ignited by heat, sparks or flames.
- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.
- Fire will produce irritating and/or toxic gases.
- If inhaled, may be harmful.

5.3 Advice for firefighters

- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.
- Fire involving Tanks; Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks; Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Fire involving Tanks; Always stay away from tanks engulfed in fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

- Eliminate all ignition sources.
- Stop leak if you can do it without risk.
- Please note that materials and conditions to avoid.
- Ventilate the area.
- Do not touch or walk through spilled material.
- Prevent dust cloud.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas..

6.3 Methods and material for containment and cleaning up

- Small Spill; Flush area with flooding quantities of water. And take up with sand or other non-combustible absorbent material and place into containers for later disposal.
- Large Spill; Dike far ahead of liquid spill for later disposal.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

6.4 Reference to other sections

- See also sections 8 and 13 of the Safety Data Sheet.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

- Please note that materials and conditions to avoid.
- Wash thoroughly after handling.
- Please work with reference to engineering controls and personal protective equipment.
- Be careful to high temperature.

7.2 Conditions for safe storage, including any incompatibilities

- Store in a closed container.
- Store in cool and dry place.

7.3 Specific end use(s)

- None

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits :

Name	ACGIH regulation	Biological exposure index	OSHA regulation	NIOSH regulation	EU regulation
POLY VINYL PYRROLIDONE	No information available	No information available	No information available	No information available	No information available
WATER	No information available	No information available	No information available	No information available	No information available
PROPYLENE GLYCOL	No information available	No information available	No information available	No information available	No information available
5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE	No information available	No information available	No information available	No information available	No information available
XANTHAN GUM	No information available	No information available	No information available	No information available	No information available
POLYACRYLIC ACID	No information available	No information available	No information available	No information available	No information available

TRIETHANOLAMINE	No information available				
POLYETHYLENE TEREPHTHALATE	No information available				
DYESTUFF	No information available				

8.2 Exposure controls

Appropriate engineering controls : No information available

Individual protection measures, such as personal protective equipment :

Respiratory protection :

- Wear NIOSH or European Standard EN 149 approved full or half face piece (with goggles) respiratory protective equipment when necessary.
- In case exposed to particulate material, the respiratory protective equipments as follow are recommended. ;facepiece filtering respirator or air-purifying respirator, high-efficiency particulate air(HEPA) filter media or respirator equipped with powered fan, filter media of use(dust, mist, fume)
- In lack of oxygen(< 19.5%), wear the supplied-air respirator or self-contained breathing apparatus.oxygen

Eye protection :

- Wear breathable safety goggles to protect from particulate material causing eye irritation or other disorder.
- An eye wash unit and safety shower station should be available nearby work place

Hand protection :

- Use protective gloves as required.

Body protection :

- Use work clothes and safety shoes as required.

Environmental exposure controls

- Prevent entry into waterways, sewers, basements or confined areas.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	
Description :	Viscous Colored Liquid
Color :	Gold& Others
Odor :	Charateristic
Odor threshold :	Not applicable
pH :	6.5 ~7.5
Melting point/freezing point :	Not applicable
Initial boiling point and boiling range :	Not applicable
Flash point :	Not applicable
Evaporation rate :	Not applicable
Flammability (solid, gas) :	Not applicable
Upper/lower flammability or explosive limits :	Not applicable
Vapor pressure :	Not applicable
Solubility (ies) :	Soluble
Vapor density :	Not applicable
Relative density :	1.00 ~ 1.04
Partition coefficient: n-octanol/water :	Not applicable

Auto ignition temperature :	Not applicable
Decomposition temperature :	Not applicable
Viscosity :	Not applicable
Explosive properties :	Not applicable
Oxidizing properties :	Not applicable
Molecular weight :	Not applicable

9.2 Other information : No information available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity :

- Fire may produce irritating and/or toxic gases.

10.2 Chemical stability :

-This product does not include forbidden raw material

10.3 Possibility of hazardous reactions :

- If inhaled, may be harmful.

10.4 Conditions to avoid :

- Heat, sparks or flames

10.5 Incompatible materials :

- Combustibles

10.6 Hazardous decomposition products :

- Irritating and/or toxic gases

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute toxicity;	
Oral	<ul style="list-style-type: none"> - POLY VINYL PYRROLIDONE : Rabbit LD₅₀ = 1,040 mg/kg - PROPYLENE GLYCOL : Rat LD₅₀ = 22,000 mg/kg - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : Rat LD₅₀ = 481 mg/kg (OECD TG 401, GLP) - POLYACRYLIC ACID : The LD50 in rats is >10,000mg/kg. Based on data from components or similar materials - TRIETHANOLAMINE : irritating to mouth, throat and stomach.
Dermal	<ul style="list-style-type: none"> - PROPYLENE GLYCOL : Rabbit LD₅₀ > 2,000 mg/kg - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : Rat LD₅₀ > 1,008 mg/kg (OECD TG 402, GLP) - POLYACRYLIC ACID : The LD50 in rabbits is >2000mg/kg. Based on data from components or similar materials
Inhalation	<ul style="list-style-type: none"> - PROPYLENE GLYCOL : Rabbit LC₅₀ > 158.5 mg/m³/4hr (LC50 > 317042 mg/m³air/2h) - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : Rat LC₅₀ = 1.23 mg/L/4hr (OECD TG 403, GLP)
Skin Corrosion/ Irritation;	<ul style="list-style-type: none"> - PROPYLENE GLYCOL : In skin irritation test with rabbits, skin irritations were not observed(OECD TG 404). - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : In acute dermal irritation/corrosion test with rabbits, corrosions were observed. (OECD TG 404, GLP) - POLYETHYLENE TEREPHTHALATE : Patch tests with humans resulted in no skin irritation. - XANTHAN GUM : Prolonged skin contact may cause temporary

	irritation. - TRIETHANOLAMINE : No known significant effects or critical hazards.
Serious Eye Damage/ Irritation;	- PROPYLENE GLYCOL : In eyes irritation test with rabbits, eyes irritations were not observed(OECD TG 405). - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : In acute eye irritation/corrosion test with rabbits, severe irritations as corrosive were observed. (OECD TG 405, GLP) - POLYETHYLENE TEREPHTHALATE : Eye contact with POLYETHYLENE TEREPHTHALATE particles may cause mechanical irritation with discomfort, tearing, or blurring of vision.
Respiratory sensitization;	Not available
Skin Sensitization;	- PROPYLENE GLYCOL : In skin sensitisation test with guinea pigs, skin sensitisations were not observed(OECD TG 406). - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : In guinea pig maximization test, sensitization reactions were observed. (OECD TG 406, GLP)
Carcinogenicity;	- POLY VINYL PYRROLIDONE : Group 3 - KOREA-ISHL, IARC, NTP, OSHA, ACGIH, EU Regulation 1272/2008: Not listed
Mutagenicity;	- POLY VINYL PYRROLIDONE : Negative reaction were observed in AMES test with ALMONELLA TYPHIMURIUM. - PROPYLENE GLYCOL : Negative reactions were observed in both in vitro-Mammalian Chromosome Aberration Test(OECD TG 473), bacterial reverse mutation assay and in vivo-mammalian bone marrow chromosome aberration test. - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : Positive reaction was observed in in vitro test (Ames test (OECD TG 406, GLP), but negative reaction was observed in in vivo test (micronucleus assay (OECD TG 475, GLP)).
Reproductive toxicity;	- PROPYLENE GLYCOL : In reproductive/developmental toxicity study with mice, no test material-related adverse effects were observed(OECD TG 414, GLP). - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : In two-generation reproduction toxicity test with rats, reactions of reproductive toxicity were not observed. (OECD TG 416, GLP)
Specific target organ toxicity (single exposure);	- PROPYLENE GLYCOL : In acute oral toxicity study (doses: 15~25 mL/kg gw) with rats, hemorrhagic areas in the small intestine, microscopic changes in kidney and slight congestion of the liver were observed. - POLYETHYLENE TEREPHTHALATE : In acute toxicity with rats, harmful effects were not observed.
Aspiration Hazard;	No information available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity	
Acute toxicity	<p>Fish :</p> <ul style="list-style-type: none"> - PROPYLENE GLYCOL : 96hr-LC₅₀ (<i>Oncorhynchus mykiss</i>) = 40613 mg/L - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : 96hr-LC₅₀ (<i>Oncorhynchus mykiss</i>) = 0.130 ~ 0.310 mg/L <p>Invertebrates :</p> <ul style="list-style-type: none"> - PROPYLENE GLYCOL : 48hr-LC₅₀ (<i>Ceriodaphnia dubia</i>) = 18340 mg/L ,7d-NOEC(<i>Ceriodaphnia</i> sp) = 13020 mg/L - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : 48hr-EC₅₀ (<i>Daphnia magna</i>) 0.120 ~ 0.300 mg/L 21d-NOEC(<i>Daphnia magna</i>)=0.172 mg/L (reproduction rate)(OECD TG 202, GLP) <p>Algae :</p> <ul style="list-style-type: none"> - PROPYLENE GLYCOL : 72hr-EC₅₀ (<i>Skeletonema costatum</i>) = 19300 mg/L (OECD TG 201, GLP)

	- 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : 72hr-EC ₅₀ (<i>Skeletonema costatum</i>) 0.018 ~ 0.026 mg/L - TRIETHANOLAMINE : 72hr-ic50 750mg/L
Chronic toxicity	Not available
12.2 Persistence and degradability	Persistence : - PROPYLENE GLYCOL : Low persistency (log Kow is less than 4 estimated.) (Log Kow = -1.07) (EU Method A.8, GLP) - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : Low persistency (log Kow is less than 4 estimated.) (Log Kow = -0.71 ~ 0.75) (20 °C)(OECD TG 117, GLP) Degradability : Not available - XANTHAN GUM : the material is readily biodegradable
12.3 Bioaccumulative potential	Bioaccumulation : - PROPYLENE GLYCOL : Bioaccumulation is expected to be low according to the BCF < 500 (BCF = 0.09) - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : Bioaccumulation is expected to be low according to the BCF < 500 (BCF = 3.162) (estimated) Biodegradation : - PROPYLENE GLYCOL : As well-biodegraded, it is expected to have low accumulation potential in living organisms (106.8% biodegradation was observed after 28 day) (OECD TG 301F, GLP) - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : As well-biodegraded, it is expected to have low accumulation potential in living organisms (97% biodegradation was observed after 48 hr) (OECD TG 302 B) - POLYACRYLIC ACID : Less than 1.0% of the components display no potential to bioconcentrate
12.4 Mobility in soil	- PROPYLENE GLYCOL : Low potency of mobility to soil. (Koc = 2.9) - 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : Low potency of mobility to soil. (Koc = 5.146) (estimated)
12.5 Results of PBT and vPvB assessment	No information available
12.6 Other adverse effects	This product does not cause water pollution.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Waste must be disposed of in accordance with federal, state and local environmental control regulations.
- Consider the required attentions in accordance with waste treatment management regulation.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number : Not applicable to the criteria for classification

14.2 UN proper shipping name : Not applicable to the criteria for classification

14.3 Transport hazard class : Not applicable to the criteria for classification
(This product is not applicable to hazard transport)

14.4 Packing group : Not applicable to the criteria for classification

14.5 Environmental hazards : Not applicable to the criteria for classification

14.6 Special precautions for users

- in case of fire : Not applicable
- in case of leakage : Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable

SECTION 15. REGULATORY INFORMATION

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

EU Regulatory Information	
EU classification	
Annex I of Directive 67/548/EEC :	
Classification :	WATER : Not classified PROPYLENE GLYCOL : Not classified 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE: Not classified
Risk phrases :	WATER : Not applicable PROPYLENE GLYCOL : Not applicable 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE: Not applicable
Safety phrases :	WATER : Not applicable PROPYLENE GLYCOL : Not applicable 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE: Not applicable
EU CLP 2008 :	
Classification :	WATER : Not classified PROPYLENE GLYCOL : Not classified 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE: Not classified
Hazard statement codes :	WATER : Not applicable PROPYLENE GLYCOL : Not applicable 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE: Not applicable
Precautionary statement codes :	WATER : Not applicable PROPYLENE GLYCOL : Not applicable 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE: Not applicable
EU SVHC list :	Not regulated
EU Authorisation List :	Not regulated
EU Restriction list :	Not regulated
Foreign Regulatory Information	
Korea management information :	POLY VINYL PYRROLIDONE: Existing Chemical Substance (KE-13324) WATER : Existing Chemical Substance (KE-35400) PROPYLENE GLYCOL : Existing Chemical Substance (KE-29267) 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE : Existing Chemical Substance (KE-05736) , Toxic Chemicals POLYETHYLENE TEREPHTHALATE : Existing Chemical Substance (KE-28979)

15.2 Chemical safety assessment :

- No chemical safety assessment has been carried out for this product by the supplier.

SECTION 16. OTHER INFORMATION

Product safety data sheet for AMOS Glitter Glue Classic prepared in accordance with Regulation (EU) 453/2010 (REACH), Annex II

16.1 Indication of changes:

Version : Rev. (00)

Revision date : 3. March . 2014

16.2. Abbreviations and acronyms:

CLP = Classification Labelling Packaging Regulation ; Regulation (EC) No 1272/2008

CAS No. = Chemical Abstracts Service number

DNEL = Derived No Effect Level

EC Number = EINECS and ELINCS Number (see also EINECS and ELINCS)

EU = European Union

OSHA = European Agency for Safety and Health at work

PBT = Persistent, Bioaccumulative and Toxic substance

PNEC(s) = Predicted No Effect Concentration(s)

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

SVHC = Substances of Very High Concern

vPvB = Very Persistent and Very Bioaccumulative

16.3 Key literature reference and sources for data:

POLY VINYL PYRROLIDONE

-American Conference of Governmental Industrial Hygienists TLVs and BEIs.

-EU CLP; <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>

-IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>

-Korea Occupational Health & Safety Agency; <http://www.kosha.net>

-LookChem; <http://www.lookchem.com/>

-NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>

-National Chemicals Information System; <http://ncis.nier.go.kr/ncis/>

-National Emergency Management Agency-Korea dangerous material inventory management system;
<http://www.nema.go.kr/hazmat/main/main.jsp>

-National Toxicology Program; http://ntp-apps.niehs.nih.gov/ntp_tox/index.cfm

-TOMES-LOLI® ; <http://www.rightanswerknowledge.com/loginRA.asp>

-TOMES-RTECS; <http://www.rightanswerknowledge.com/loginRA.asp>

-U.S. National library of Medicine(NLM) Hazardous Substances Data Bank(HSDB); <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>

-Waste Control Act enforcement regulation attached [1]

WATER

-AKRON; <http://ull.chemistry.uakron.edu/erd>

-American Conference of Governmental Industrial Hygienists TLVs and BEIs.

-EU CLP; <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>

-IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>

-Korea Occupational Health & Safety Agency; <http://www.kosha.net>

-NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>

-National Chemicals Information System; <http://ncis.nier.go.kr/ncis/>

-National Emergency Management Agency-Korea dangerous material inventory management system;
<http://www.nema.go.kr/hazmat/main/main.jsp>

-National Toxicology Program; http://ntp-apps.niehs.nih.gov/ntp_tox/index.cfm

-TOMES-LOLI® ; <http://www.rightanswerknowledge.com/loginRA.asp>

-Waste Control Act enforcement regulation attached [1]

PROPYLENE GLYCOL

-American Conference of Governmental Industrial Hygienists TLVs and BEIs.

-EU CLP; <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>

-IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>

-Korea Occupational Health & Safety Agency; <http://www.kosha.net>

-NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>

-National Chemicals Information System; <http://ncis.nier.go.kr/ncis/>

-National Emergency Management Agency-Korea dangerous material inventory management system;
<http://www.nema.go.kr/hazmat/main/main.jsp>

-National Toxicology Program; http://ntp-apps.niehs.nih.gov/ntp_tox/index.cfm

-REACH information on registered substances; <http://apps.echa.europa.eu/registered/registered-sub.aspx>

-TOMES-LOLI® ; <http://www.rightanswerknowledge.com/loginRA.asp>

-Waste Control Act enforcement regulation attached [1]

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE

-American Conference of Governmental Industrial Hygienists TLVs and BEIs.

-EU CLP; <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>

-IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>

-Korea Occupational Health & Safety Agency; <http://www.kosha.net>

-NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>

-National Chemicals Information System; <http://ncis.nier.go.kr/ncis/>

- National Emergency Management Agency-Korea dangerous material inventory management system; <http://www.nema.go.kr/hazmat/main/main.jsp>
- National Toxicology Program; http://ntp-apps.niehs.nih.gov/ntp_tox/index.cfm
- Waste Control Act enforcement regulation attached [1]
- ECOTOX; <http://cfpub.epa.gov/ecotox>
- EPISUITE v4.1; <http://www.epa.gov/opt/exposure/pubs/episuitedl.htm>
- International Uniform Chemical Information Database(IUCLID); <http://esis.jrc.ec.europa.eu>

POLYETHYLENE TEREPHTHALATE

- American Conference of Governmental Industrial Hygienists TLVs and BEIs.
- EU CLP; <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>
- IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>
- Korea Occupational Health & Safety Agency; <http://www.kosha.net>
- NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>
- National Chemicals Information System; <http://ncis.nier.go.kr/ncis/>
- National Emergency Management Agency-Korea dangerous material inventory management system; <http://www.nema.go.kr/hazmat/main/main.jsp>
- National Toxicology Program; http://ntp-apps.niehs.nih.gov/ntp_tox/index.cfm
- Waste Control Act enforcement regulation attached [1]
- LookChem; <http://www.lookchem.com>
- Sigmaaldrich: <http://www.sigmaaldrich.com/canada-english.html>
- U.S. National library of Medicine (NLM) Hazardous Substances Data Bank (HSDB) ; <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>.

XANTHAN GUM

- US. IARC Monographs on Occupational Exposures to Chemical Agents
- NLM: Hazardous Substances Data Base
- Korea. Accidental Release Prevention Substances (Presidential Decree of Toxic Chemical Control Law, Executive Order No. 19203)
- Korea. Dangerous Substances Threshold Quantity (Presidential Decree of Dangerous Substances Safety Management Act No. 18406, Schedule 1)
- Korea. Harmful Substances Prohibited from Manufacturing (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 29)
- Korea. Harmful Substances Requiring Permission for Manufacture or Use (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 30)
- Korea. Non-Toxic Chemicals List (National Institute of Environment Research (NIER) Public Notice No. 1997-10, as amended)
- Korea. Observational Chemicals (Ministerial Decree of TCCL Article 6)
- Korea. OELs. Regulation for Permitted Concentration of Hazardous Substances (Ministry of Labor (MOL) Public Notice No. 1986-45, as amended)
- Korea. Prohibited Chemical Substances (TCCL Article 11)
- Korea. Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001, as amended)
- Korea. Restricted Chemical Substances (TCCL Article 11)
- Korea. Toxic Chemical Control Law (TCCL), Existing Chemicals Inventory (KECI)
- Korea. Toxic Chemical Control Law (TCCL), pre-1997 List
- Korea. Toxic Chemicals (TCCL Article 10)
- Korea. Toxic Release Inventory (TRI) Chemicals (TCCL Article 14)

POLYACRYLIC ACID

- USA** All components of this material are on the US TSCA Inventory or are exempt.
- Other TSCA Reg.** None known.
- EU** All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.
- Japan** All components are in compliance with the Chemical Substances Control Law of Japan.
- Australia** All components are in compliance with chemical notification requirements in Australia.
- New Zealand** All components are in compliance with chemical notification requirements in New Zealand.
- Canada** All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
- Switzerland** All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
- Korea** All components are in compliance in Korea.
- Philippines** All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
- China** All components of this product are listed on the Inventory of Existing Chemical Substances in China.

TRIETHANOLAMINE

- Europe inventory : Not determined
- Japan inventory : Not determined.
- United States inventory(TSCA 8b) : All components are listed or exempted.
- Safety, health and environmental regulations specific for the product
: No known specific national and/or regional regulations applicable to this product(including its ingredients).

16.4 Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008
[CLP]: Not applicable

16.5 Relevant R-phrases and/or H-statements (number and full text): Not applicable

16.6 Training advice:

- Do not handle until all safety precautions have been read and understood.

16.7 Further information:

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation, as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship.