



Print Date: 8/6/2013

MSDS Number: R0718740

Version: 1.2

45030A2 CRUMB 807394

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland

Regulatory Information Number

1-800-325-3751

P.O. Box 2219

Telephone

614-790-3333

Columbus, OH 43216

Emergency telephone number

1-800-ASHLAND (1-800-274-5263)

Product name

45030A2 CRUMB

Product code

807394

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, Semisolid, amber

CAUTION!

MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE EYE IRRITATION.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

Unlikely to cause skin irritation or injury. May cause allergic skin reaction.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

Breathing of vapor or mist is possible. It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material:, Skin, lung (for example, asthma-like conditions)

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Cough, Exposure to this product (or a component) may cause an allergic reaction (narrowing of the air passages of the lungs resulting in difficult breathing, tightness in the chest, coughing and wheezing) in





Print Date: 8/6/2013

MSDS Number: R0718740

Version: 1.2

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some sensitive individuals. Other symptoms of an allergic reaction may include itchy and watery eyes, runny and stuffy nose, sweating, flushing, hives, rapid heart rate, and lowered blood pressure.

Target Organs

No data

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

Based on the available information, risk to the fetus from maternal exposure to this material cannot be assessed.

Other information

Prolonged exposure to smoke or fumes generated by heating this product may cause respiratory irritation with throat discomfort, coughing, or breathing difficulty. Repeated exposure may lead to respiratory sensitization (asthma) in susceptible individuals.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No. / Trade Secret No.	Concentration
LIMESTONE	1317-65-3	>=10-<15%
ROSIN, POTASSIUM SALT	61790-50-9	>=5-<10%
TRIS(NONYLPHENYL) PHOSPHITE	26523-78-4	>=1.5-<5%

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

No data

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation





Print Date: 8/6/2013

MSDS Number: R0718740

Version: 1.2

45030A2 CRUMB 807394

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.

Treatment: No information available.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO2), Water spray

Hazardous combustion products

calcium oxide, carbon dioxide and carbon monoxide, Oxides of phosphorus

Precautions for fire-fighting

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification

not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Other information

Comply with all applicable federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.





Print Date: 8/6/2013

MSDS Number: R0718740

Version: 1.2

45030A2 CRUMB 807394

Storage

Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

LIMESTONE	-	1317-65-3	
NIOSH	Recommended exposure limit (REL):	10 mg/m3	Total
NIOSH	Recommended exposure limit (REL):	5 mg/m3	Respirable
OSHA Z1	Permissible exposure limit	5 mg/m3	Respirable fraction.
OSHA Z1	Permissible exposure limit	15 mg/m3	Total dust.

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection

Wear resistant gloves (consult your safety equipment supplier).

Discard gloves that show tears, pinholes, or signs of wear.

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.





Print Date: 8/6/2013

MSDS Number: R0718740 Version: 1.2

45030A2 CRUMB 807394

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid	
Form	Semisolid	
Colour	amber	
Odour	characteristic	
Flash point	The state of the s	
·	not applicable	
Density	0.91 - 0.96 g/cm3	

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

excessive heat, Heat, flames and sparks., Exposure to sunlight.

Incompatible products

Acids, ammonium salts, aluminum salts, Fluorine, Oxidizing agents

Hazardous decomposition products

calcium oxide, carbon dioxide and carbon monoxide, Oxides of phosphorus

Hazardous reactions

Product will not undergo hazardous polymerization.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of

exposure

Inhalation

Skin absorption Skin contact

Eye Contact Ingestion

Product

Acute oral toxicity

no data available

Acute inhalation toxicity

no data available

Acute dermal toxicity

no data available





Print Date: 8/6/2013 MSDS Number: R0718740

Version: 1.2

45030A2 CRUMB 807394

Skin corrosion/irritation

no data available

Serious eye damage/eye

no data available

irritation

Respiratory or skin sensitisation

no data available

Components:

LIMESTONE:

Acute oral toxicity

LD 50 Rat: 6,450 mg/kg

ROSIN. POTASSIUM SALT:

Acute oral toxicity

: LD 50 Rat: > 2,000 mg/kg Based on similar product.

Acute dermal toxicity

: LD 50 Rat: > 2,000 mg/kg Based on similar product.

Respiratory or skin sensitisation

Species: mouse

Classification: Did not cause sensitisation on laboratory animals.

Result: Did not cause sensitisation on laboratory animals.

Method: Local lymph node assay

TRIS(NONYLPHENYL) PHOSPHITE:

Acute oral toxicity

LD 50 Rat: 9,800 mg/kg

Acute dermal toxicity

LD 50 Rat: > 2,000 mg/kg

Method: OECD Test Guideline 402

Respiratory or skin sensitisation

May cause sensitisation of susceptible persons by skin contact.

12. ECOLOGICAL INFORMATION

Ecotoxicity Product:

no data available

Components:





Print Date: 8/6/2013

MSDS Number: R0718740

Version: 1.2

45030A2 CRUMB 807394

TRIS(NONYLPHENYL) PHOSPHITE:

Toxicity to fish

LC 50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h
Test Method: static test

Method: OECD Test Guideline 203 No toxicity at the limit of solubility

Toxicity to daphnia and other

aquatic invertebrates

: EC 50 (Water flea (Daphnia magna)): 0.3 mg/l

Exposure time: 48 h
Test Method: static test
Test substance: WAF

Persistence and degradability

Product:

no data available

Components:

ROSIN, POTASSIUM SALT:

Biodegradability

Biodegradation: 89.5 %

Method: OECD Test Guideline 302B

TRIS(NONYLPHENYL) PHOSPHITE:

Biodegradability

activated sludge

Biodegradation: < 4 % Exposure time: 28 d

Method: OECD Test Guideline 301D

Bioaccumulative potential

Product:

no data available

Components:

ROSIN, POTASSIUM SALT:

Partition coefficient: n-

: log Pow: 3 - 7

octanol/water

Mobility in soil

Product:

no data available

Page 7 / 10





45030A2 CRUMB 807394 Revision Date: 07/06/2013

Print Date: 8/6/2013 MSDS Number: R0718740

Version: 1.2

Components:

no data available

13. DISPOSAI	L CONSIDERATIONS	,			
Waste dispos					
Dispo	se of in accordance with all applic	cable local, state	e and federal regu	lations.	
44 TRANSPO	PRT INFORMATION		· · · · · · · · · · · · · · · · · · ·		1
14. IRANSPO	REINFORMATION				
	•	·			
REGULATION					
ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT /
LIC DOT DO					LTD. QTY.
U.S. DOT - RO	· · · · · · · · · · · · · · · · · · ·				
	Not dangerous goods	· · · · · · · · · · · · · · · · · · ·			
U.S. DOT - RAI	L				
	Not dangerous goods				
				·.	
U.S. DOT - INL	AND WATERWAYS	•			
	Not dangerous goods				
TRANSPORT C	CANADA - ROAD				-
	Not dangerous goods			· · ·	
TDANSDODT (CANADA - RAIL	•			
TRANSFORT	Not dangerous goods	.			
L	Not dangerous goods				·
TRANSPORT C	ANADA - INLAND WATERWAY	S			
	Not dangerous goods				
	•		•		
INTERNATION	AL MARITIME DANGEROUS GO	ODS			
	Not dangerous goods	· · · · · · · · · · · · · · · · · · ·	·		
INTERNATION	AL AIR TRANSPORT ASSOCIAT	TION - CARGO			
	Not dangerous goods				
	*	FIGN. BAGGET			
INTERNATION	AL AIR TRANSPORT ASSOCIAT	TION - PASSEN	IGER		
	Not dangerous goods		-		
MEXICAN REG	ULATION FOR THE LAND TRAI	NSPORT OF HA	AZARDOUS MAT	ERIALS AND	WASTES
	Not dangerous goods				
*ORM = ORM-E), CBL = COMBUSTIBLE LIQUID)			





45030A2 CRUMB 807394 Revision Date: 07/06/2013

Print Date: 8/6/2013

MSDS Number: R0718740

Version: 1.2

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SARA 313 Component(s)

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Notification status

y (positive listing)
y (positive listing)
y (positive listing)
y (positive listing)

	HMIS	NFPA
Health	2	2
Flammability	1	1
Physical hazards	0	
Instability		0
Specific Hazard		-

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current,

Page: 10



Revision Date: 07/06/2013

Print Date: 8/6/2013

MSDS Number: R0718740

Version: 1.2

45030A2 CRUMB 807394

applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet:

ACGIH: American Conference of Industrial Hygienists

BEI: Biological Exposure Index

CAS: Chemical Abstracts Service (Division of the American Chemical Society).

CMR: Carcinogenic, Mutagenic or Toxic for Reproduction

FG Food grade

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization

ICAO-TI (ICAO): Technical Instructions by the "International Civil Aviation Organization"

IMDG: International Maritime Code for Dangerous Goods

ISO: International Organization for Standardization

logPow: octanol-water partition coefficient

LCxx: Lethal Concentration, for xx percent of test population

LDxx: Lethal Dose, for xx percent of test population. ICxx: Inhibitory Concentration for xx of a substance

Ecxx: Effective Concentration of xx N.O.S.: Not Otherwise Specified

OECD: Organization for Economic Co-operation and Development

OEL: Occupational Exposure Limit P-Statement: Precautionary Statement PBT: Persistent, Bioaccumulative and Toxic

PPE: Personal Protective Equipment STEL: Short-term exposure limit STOT: Specific Target Organ Toxicity

TLV: Threshold Limit Value TWA: Time-weighted average

vPvB: Very Persistent and Very Bioaccumulative

WEL: Workplace Exposure Level

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

DOT: Department of Transportation

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act HMIRC: Hazardous Materials Information Review Commission

HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health OSHA: Occupational Safety and Health Administration

PMRA: Health Canada Pest Management Regulatory Agency

RTK: Right to Know

WHMIS: Workplace Hazardous Materials Information System