Material: Pre-filled normal saline flush syringe

Approved/Revised: July. 21st, 2022

AMSINO.

MATERIAL SAFETY DATA SHEET

May be used to comply with OSHA's Hazard communication Standard 29CFR 1910.1200

Product:

IVF1210, IVF1205, IVF1203, IVF2020, IVF1010, IVF1003, IVF1005, IVF1010T, IVF1010TM

Material composition:

Component Material Barrel PP

Stopper Bromobutyl

Plunger

Cap PP with or without white colorant

Saline NaCl

Manufacturer: Amsino International



Date Issued: 04/06/2005 MSDS No: PF531 Date Revised: 07/13/2010

Revision No: 3

Pro-fax PF531

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Pro-fax PF531

PRODUCT DESCRIPTION: Polypropylene Homopolymer Pellets

MANUFACTURER

Equistar Chemicals, LP One Houston Center, Suite 700 1221 McKinney St. P.O. Box 2583

Houston TX 77252-2583

Product Stewardship: 800.700.0946

Alternate Emergency Phone: 800.245.4532

Basell Canada Inc. c/o 200 Bay Street Royal Bank Tower Suite 3800 Toronto, Ontario, Canada M5J 2Z4

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation):(800) 424 - 9300 CANUTEC (Canadian Transportation):(613) 996 - 6666

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Translucent to white solid pellets

IMMEDIATE CONCERNS: Spilled material may present a slipping hazard. This product as shipped is not classified as a combustible dust; however, a combustible concentration of dust may occur if fines are suspended in air. Avoid contact with strong oxidizing agents. When working with the material at temperatures above the melting point, the material will begin to decompose producing fumes that can contain carbon dioxide, carbon monoxide, ketones, acrolein, formaldehyde, aldehydes and other unidentified organic compounds that come from the breakdown of the material. Adequate room and extruder ventilation should be provided to minimize exposures.

POTENTIAL HEALTH EFFECTS

EYES: Process vapors may irritate eyes.

SKIN: Exposure to molten resin may cause thermal burns.

INGESTION: Not Applicable

INHALATION: Process vapors may cause respiratory tract irritation.



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SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Irritation or redness.

SKIN: Not Applicable

INHALATION: Irritation of the nose, throat and respiratory tract.

CHRONIC EFFECTS: None Known **CARCINOGENICITY:** None Known

MUTAGENICITY: None Known

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: None Known **TERATOGENIC EFFECTS:** None Known

MEDICAL CONDITIONS AGGRAVATED: None Known

ROUTES OF ENTRY: Eye, Inhalation

TARGET ORGAN STATEMENT: None Known

SENSITIZATION: None Known

WARNING CAUTION LABELS: Burn Risk - Avoid contact with molten resin. Explosion Risk - Prevent accumulation of dust particles. Slipping Risk - Keep walking surfaces free of spilled material. Vapor Risk - Provide ventilation to avoid exposure to process vapors.

PHYSICAL HAZARDS: Spilled material may present a slipping hazard. Exposure to molten resin may cause thermal burns.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Polypropylene homopolymer	> 95	9003-07-0
Stabilizers (trade secret)	< 5	

4. FIRST AID MEASURES

EYES: Flush eyes with water for 15 minutes. Get medical attention.

SKIN: Molten Resin: If molten material comes in contact with the skin, cool under ice water or a running stream of water. DO NOT attempt to remove the material from the skin. Removal could result in severe



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tissue damage. Get medical attention.

INGESTION: Not Applicable

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult,

give oxygen. Get medical attention.

5. FIRE FIGHTING MEASURES

AUTOIGNITION TEMPERATURE: $> 357^{\circ}\text{C}$ (675°F)

EXTINGUISHING MEDIA: Use foam, carbon dioxide, or water spray when fighting fires involving this material.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide, ketones, acrolein, formaldehyde, aldehydes, unidentified organic compounds.

EXPLOSION HAZARDS: Product as shipped is not a combustible dust. However, a combustible concentration of dust may occur when fines are suspended in air.

FIRE FIGHTING PROCEDURES: Standard procedures for Class A fires.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained pressure demand breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

SENSITIVE TO STATIC DISCHARGE: Static discharge could be an ignition source for a combustible concentration of dust.

SENSITIVITY TO IMPACT: Not Applicable

6. ACCIDENTAL RELEASE MEASURES

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Keep pellets out of waterways.

LAND SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.

GENERAL PROCEDURES: Vacuum or sweep up material and place in a disposal container.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep away from heat, sparks and flame.

HANDLING: Ground and bond containers when transferring material.



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STORAGE: This product may react with strong oxidizing agents and should not be stored near such materials. Store boxes and bags of material in areas protected with automatic sprinklers.

STORAGE TEMPERATURE: Minimum to 60°C (140°F) Maximum

ELECTROSTATIC ACCUMULATION HAZARD: Material may accumulate static charges during transfers. Ground and bond containers when transferring material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide adequate room ventilation. Provide adequate ventilation at the extruder to minimize exposure to process vapors. Eliminate ignition sources during repair and maintenance operations.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields (or goggles).

SKIN: When handling or processing resins at elevated temperatures or in a molten state, wear protective clothing over the skin to prevent contact. Wear suitable gloves.

RESPIRATORY: A respiratory protection program that meets OSHA 1910.134, ANSI Z88.2 and/or CSA Z94.4-93 requirements must be followed whenever workplace conditions warrant use of a respirator.

OTHER USE PRECAUTIONS: Eyewash fountains and safety showers should be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid

ODOR: Slight waxy odor

APPEARANCE: Pellet

COLOR: Translucent to white

pH: Not Applicable

PERCENT VOLATILE: < 0.4%

VAPOR PRESSURE: Not Applicable

VAPOR DENSITY: Not Applicable

BOILING POINT: Not Applicable



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FREEZING POINT: Not Applicable

MELTING POINT: > 160° C (320° F)

SOLUBILITY IN WATER: Negligible

EVAPORATION RATE: Not Applicable

SPECIFIC GRAVITY: 0.880 to 0.92

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Avoid contact with water.

Keep away from heat, sparks and flame.

Avoid contact with strong oxidizing agents, strong alkaline and strong acid.

HAZARDOUS DECOMPOSITION PRODUCTS: At elevated temperatures the material will begin to decompose, producing fumes that can contain carbon dioxide, carbon monoxide, ketones, acrolein, formaldehyde, aldehydes, unidentified organic compounds.

INCOMPATIBLE MATERIALS: Oxidizing materials.

11. TOXICOLOGICAL INFORMATION

GENERAL COMMENTS: Polypropylene Homopolymer Toxicological Information LD50/LC50 - LETHAL DOSE/CONC 50% KILL A. Rat 1. LD50; Route: Intraperitoneal; Dose: >110 gm/kg; Toxic Effects: Sense Organs and special senses - Lacrimation; Sense organs and special senses - Ptosis; Behavioral - Convulsions or effect on seizure threshold; Reference: Yakuri to Chiryo. Pharmacology and Therapeutics 14:1109, 1986. 2. LD50; Route: Intravenous; Dose: >99 gm/kg; Toxic Effects: Behavioral - Tremor; Lungs, Thorax, or Respiration - Cyanosis; Nutritional and Gross Metabolic - Body temperature decrease; REFERENCE: Yakuri to Chiryo. Pharmacology and Therapeutics 14:1109, 1986.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Available

ECOTOXICOLOGICAL INFORMATION: Not Available



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CHEMICAL FATE INFORMATION: Not readily biodegradeable.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: (1) Recycle (reprocess). (2) Incineration including energy recovery of waste material in a permitted facility in accordance with local, state or provincial and federal regulations. (3) Landfilling in a licensed facility in accordance with local, state or provincial and federal regulations.

RCRA HAZARD CLASS: This product is not judged to be a hazardous waste by any local, state or federal regulations; however, it may be listed as industrial waste in some states or provinces. This product is not listed in the U.S. federal hazardous waste regulations, 40 CFR 261.33 paragraphs (e) or (f), i.e., chemical products that are considered hazardous if they become wastes. It does not exhibit any of the hazardous characteristics listed in 40 CFR 261 Subpart C. State or local hazardous waste regulations may apply if different from the federal.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

SPECIAL SHIPPING NOTES: This product is not regulated by DOT, IMO, IATA, Canadian TDG and associated regulations, ADR or RID.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

TITLE III NOTES: This product is not subject to SARA Title III requirements.

OSHA HAZARD COMM. RULE: This product is not considered a hazardous material at temperatures below the melting point as determined by Basell according to OSHA definitions.

CLEAN WATER ACT: This product is regulated under EPA's Clean Water Act/NPDES rules as "floating material". In addition, this product is considered "significant material" under the EPA's storm water permit rules.

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): This product is not considered a controlled substance under WHMIS. This MSDS meets WHMIS format requirements.



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16. OTHER INFORMATION

REASON FOR ISSUE: Legal entity and address information modified.

APPROVED BY: Richard T. LeNoir **TITLE:** Manager, Product Stewardship

REVISION SUMMARY: Revision #: 3. This MSDS replaces the July 08, 2010 MSDS. Any changes in information are as follows: In Section 1: Reason for Issue

MANUFACTURER DISCLAIMER: The information contained in this Material Safety Data Sheet has been compiled from sources which Equistar Chemicals, LP, Basell Canada Inc. and Basell Poliolefinas, S. de R.L. de C.V. as applicable (each, a "Seller") considers reliable and accurate to the best of Seller's knowledge. This information relates only to the specific product described above, and not to use of the product in combination with another material. Customers and other users should read this MSDS and the product label carefully before using the product. Seller neither assumes, nor authorizes anyone to assume on Seller's behalf, any liability in connection with the use of the information in this MSDS. Customers and other users should do their own testing before making commercial use of the product to ensure that the product is fit for the intended application and that the product can be used, and any waste material disposed of, safely, properly, and legally based on the customer's or other user's circumstances. SELLER MAKES NO WARRANTIES, EXPRESSES OR IMPLIES, WITH RESPECT TO THE PRODUCT, INCLUDING (WITHOUT LIMITATION) WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE CUSTOMER OR OTHER USER OF THE PRODUCT ASSUMES ALL RISK AND LIABILITY ARISING OUT OF THE USE OF THE PRODUCT, WHETHER USED ALONE OR IN COMBINATION WITH OTHER MATERIALS. SELLER'S LIABILITY, IF ANY, FOR BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE (INCLUDING THAT OF SELLER) OR OTHER TORT, STRICT LIABILITY, OR ANY OTHER CLAIM SHALL NOT EXCEED IN AMOUNT THE PURCHASE PRICE OF SELLER PRODUCTS WITH RESPECT TO WHICH SUCH CAUSE AROSE. IN NO EVENT SHALL SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES.

Safety technology instruction

According to the national standards GB13690-2009 and GB/T16483-2008, chemical product classification and label globle harmonized system(GHS)



Lanxess Bromobutvl 2030

00717495

Section 1 Substance or compound and label of supplier

Product name : Lanxess Bromobutyl 2030

Usage : Raw material for tire production and rubber industrial products

Supplier/Manufacture : LANXESS Chemical (China) Co., Ltd.

16/F, Park Place,

NO.1601 Nan Jing Road (West), Shanghai, 200040, P.R. China

tele:021-61096666

Langsheng chemistry (China) Co., Ltd.

The 16th floor, Yueyang square, No. 1601 Nanjing western road, Jingan

district, Shanghai

: Tel: 021-61096666

Emergency telephone +86 532 83889090

Section 2 Hazard identification

Classification for

: Unclissified.

substance or mixture

Essential factor for chemical product classification and GHS

Warming word : No warming words.

Danger note : No obvious known effect or serious dangers.

Preventive note

Preventive measures:Not applicable.Accident disposal:Not applicable.Storage:Not applicable.

Disposal : Not applicable.

Not lead to other dangers

of classification.

: No data.

Section 3 Composition

Substance/Preparation : Mixture Chemical name : No data

Other label measure : BIIR ; Halo-butyl.

Product identification : Copolymer composed of isobutylene and isoprene, brominated (Bromobutyl rubber

BIIR), CAS号: 68441-14-5

American Chemical Abstracts Service (CAS) number/Other label number

CAS number : Not applicable.

Did not appear to uptake the current concentration of the supplier, is classified as hazardous to health or the environment and therefore need to be reported in this section

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Section 3 Composition

Occupational exposure limits, if any, are listed in Section 8.

Section 4 Emergency measures

Indicate the necessary measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check and remove any contact lenses. If feel pain, get medical attention

eyelids. Check and remove any contact lenses. If feel pain, get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Seek medical attention if symptoms occur.

Skin contact: Flush contaminated skin with plenty of water. Take off contaminated clothing and

shoes. Seek medical attention if symptoms occur.

Ingestion : Rinse mouth with water. Remove victim to fresh air and keep at rest in a position

comfortable for breathing. If the substance has been swallowed and the patient is awake, drink a small amount of water. Do not induce vomiting unless directed by a

medical professional. Seek medical attention if symptoms occur.

The most important acute and delayed symptoms / effects

Potential acute health effects

Eye contact: No obvious known effect or serious danger.
 Inhalation: No obvious known effect or serious danger.
 Skin contact: No obvious known effect or serious danger.
 Ingestion: No obvious known effect or serious danger.

Over-exposure to signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

If necessary, indicate immediate medical attention and special treatment needed

Doctor's note : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Special deal : No special deal.

First aid person protection: No action shall be taken involving any personal danger or without proper train.

Please refer to "Toxicological information" (The 11th part)

Section 5 Fire-fighting measures

Extinguishing media

Proper extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Improper extinguishing media: No known information.

Specific hazards arising

from chemicals

: No special fire or explosion damage.

Hazardous thermal

: Decomposition products may include the following materials::

decomposition products

carbon dioxide Carbon monoxide

Special protective equipment and precautions 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 danger or without proper training.

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Section 5 Fire-fighting measures

and precautions for fire-fighters

Special protective equipment: Fire-fighters should wear appropriate protective equipment and self-contained positive pressure breathing apparatus (SCBA) with full face protection.

Section 6 Accident exclusion measures

Personal precautions, protective equipment and emergency procedures

: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See "Non-emergency responders" section for information.

Environmental precautions

: Avoid dispersal of spilled material and runoff and avoid contact with spills and into soil, rivers, sewers and sewers. If the product has resulted in environmental contamination (sewer, waterway, soil or air), inform the appropriate authorities.

Methods and materials for containment and cleaning

Remove the container from the leak area. Clean or thoroughly clean the contaminants with a vacuum cleaner and place in a waste container labeled with the specified label. Disposed of by the licensed waste disposal contractor.

A lots leak

Small leak

Remove the container from the leak area. Prevent access to sewers, watercourses, basements or confined areas. Clean or thoroughly clean the contaminants with a vacuum cleaner and place in a waste container labeled with the specified label. Disposed of by the licensed waste disposal contractor. NOTE: Refer to Section 1 for emergency contact information and Section 13 for waste

Removal and storage 搬运和存储 Section 7

Safe removal precautions

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Staff should wash their hands before eating and smoking. Before entering the diet area, take off contaminated clothing and protective equipment.

Conditions for safe storage, including any incompatibilities

Do not store above the following temperatures: 35 $^{\circ}$ C (95 $^{\circ}$ F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and wellventilated area away from contraindications (See section 10), food and drink. Keep container tightly closed and sealed before using container. Opened containers must be carefully resealed and held upright to prevent leakage. Do not store in unlabeled containers. Use suitable containment methods to prevent contamination of the environment.

NOTE:

: Keep away from direct sunlight or strong incandescent light.

Contact control/Body protection Section 8

Control parameter

When processing the following substances must comply with its regulations, especially at higher temperatures. In our experience, the use of effective fresh air and exhaust ventilation where steam is generated will ensure that the permissible limits mentioned below

Occupational exposure limits Recommended monitoring procedures

No data. National Occupational Health Standard GBZ2.1-2007 there is no clear provision.

Where products contain ingredients with exposure limits, the individual's, the workplace's atmospheric or biological environment should be monitored to determine the effectiveness of ventilation or other controls and / or the need to use respiratory protection equipment.

proper engineering controls: No special ventilation requirements. Good general ventilation should be sufficient to control airborne pollutant levels in the working environment of workers. This product, if used, contains ingredients with exposure limits. Use an isolator, local ventilation system, or other process control method to ensure that workers work in environments where recommended or statutory limits are not

Environment contact control: Emissions from ventilated or work-process equipment should be tested to ensure that they meet the requirements of environmental regulations. In some cases it may be necessary to retrofit smoke scrubbers, filters or process equipment to reduce emissions to acceptable levels.

Personnel protective measure

Health measure

: After chemical exposure, wash hands, forearms and face thoroughly before eating, before smoking, before going to the toilet and after work is done. Use appropriate techniques to remove clothing that may be contaminated. Contaminated clothing needs to be cleaned before reuse. Make sure the eye wash station and safety shower are close to the work place.

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Section 8 Contact control/Body protection

Eye protection

: If risk assessment indicates that exposure to liquid splashes, mist, gas or dust must be avoided, wear safety glasses in accordance with standard. Possibly: Safety glasses with side shields.

Body protection

Hand protection : If risk assessment indicates this is necessary, always wear chemically resistant, impervious gloves when handling chemical products.

Body protection

. The choice of personal protective equipment should be based on the type of work performed and the risks involved, and must be approved by a professional.

Other skin protection

: The choice of suitable footwear and any other skin protection should be based on the tasks being performed and the risks involved, and be licensed by an expert before handling the product.

Respiratory protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if risk assessment results indicate this is necessary. The selection of respirators must be based on known or expected exposure levels, the hazards of the product, and the safe working limits of the selected respirator. Possibly: Although no exposure restrictions have been established on the product, it is recommended to press Permissible Exposure Limit (PEL) for OSHA's "Other Unmanaged Particulate" (PNOR), dust total 15 mg/m3 respirable fraction 5 mg/m3. In addition, the recommended ACGIH respirable.

mg/m3, respirable fraction 5 mg/m3. In addition, the recommended ACGIH respirable particulate matter 3mg/m3, other unmanaged particulate (insoluble) inhalable particles 10mg/m3. The following respirators are recommended if the concentration in the air exceeds the appropriate standard/reference. NIOSH approved, air purifying particulate

respirator with N95 filter

Section 9 Physical and chemical character

Appaerance

Physical stature : Solid [Plastic bag]
Color : White to light yellow.

Odor : Odorless
Odor threshold : No data.
pH : No data.
Melting point : No data.
Boiling point : No data.

Flash point : Closed cup: >210°C (>410°F (Fahrenheit))

Burning time : No data
Burning rate : No data
Evaporation rate : No data

Flammability (Solid, gas) :No data.

Explosion (burning) upper and lower limits : No data. Vapor density : No data.

Density : 0,92 kg/L (20 ° C)

Relative density : No data.

Solubility : Insoluble in the following materials: cold water

Decomposition temperature :>170°C (>338°F (Fahrenheit))

Self-accelerating decomposition temperature : No data.

Viscosity : No data.

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Section 10 Stability and reactivity

Activity : No test data related to reactivity of the product or its ingredients.

Chemistry stability : Product is stable.

Possibility of dangerous reaction :Under normal conditions of storage and use, hazardous reactions not occur.

Avoid condition

: No specific data.

Incompatible materials

: No specific data.

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous reactions not occur.

Section 11 Toxicology information

Under recommended processing conditions, small amounts of spilled material (eg trace monomers, traces of solvents, decomposition products) may be released. According to our experience and information, if operated correctly, this product is not harmful to health.

Toxicological information

Irritation / corrosion

Specific target organ toxicity (single exposure)

No data.

Specific target organ toxicity (repeated exposure)

No data.

Danger of inhalation

No data.

Information on possible routes of exposure : No data.

Potential acute health effects

Eye contact : No obvious known effect or serious dangers.

Skin contact : No obvious known effect or serious dangers.

Symptoms related to physical, chemical and toxicological properties

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

Delayed and immediate impact, as well as chronic effects from short and long term exposure

Short-term exposure

Potential immediate effects : No data.

Potential delay effects : No data.

Long-term exposure

Potential immediate effects : No data.

Potential delay effects : No data.

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Section 11 Toxicology information

Toxicity measures

Acute toxicity estimate

No data.

Section 12 Ecological information

The product is practically insoluble in water. Given its persistence and insolubility in water, no ecological problems are expected without proper operation of the product. The product is not easily biodegradable.

Toxicity

No data.

Persistence and degradability

No data.

Bioaccumulative potential

No data.

Mobility in the soil

Soil / water partition coefficient (Koc) : No data.

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

Section 13 Disposal consideration

Disposal methods

: As far as possible, waste should be avoided or reduced. A significant amount of residual product waste should not pass through sewers

It should be disposed of in a suitable sewage treatment plant. Residual and non-renewable products are handled by licensed waste disposal contractors. Disposal of products, solutions and their by-products should comply with the requirements of environmental protection, waste disposal regulations and local regulations.

Packaging waste should be recycled. Only consider incineration or landfill if recycling is not feasible. Use a safe method to dispose of this product and its container. Empty containers or liners may retain some product residue. Avoid dispersal of spilled material and runoff and avoid contact with spills and into soil, rivers, sewers and sewers.

Section 14 Transportation information

	IMDG	IATA
UN number	_	_
UN proper shipping name	_	_
Transport dangerous species	_	_

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Section 14 Transportation information

Package group	_	-
Ocean pollution	No	No
Special precautions for users	Not regulated.	Not regulated.

Transport in bulk according : No data. to Annex II of MARPOL 73/78

and the IBC Code

Hazardous Notes

Non-dangerous object Save with food separately.

Section 15 Management information

Have referred to following rules

- : 1. 《Hazardous chemicals safety regulations》
 - 2. China Classification of Chemicals, warning labels and precautionary statements of safety regulations (GB20576 \sim 20602);
 - 3. 《Dangerous goods list》 (GB12268-2005);
 - 4. 《Chemical Safety Data Sheet Contents and order of the items》 (GB/T16483-2008);
 - 5. 《Dangerous goods classification and product name number》(GB6944-2005);
 - 6. 《General rules for the classification and hazard communication of chemicals》 GB13690-2009;
 - 7. 《National hazardous waste directory》 (2008.8.1become effective);
 - 8. 《危险化学品名录》(2002);
 - 9. $\langle\!\!\langle 0ccupational \rangle\!\!\rangle$ exposure limits for hazardous agents in the workplace - Part 1: Chemical factors $\rangle\!\!\rangle$ (GBZ 2.1-2007) .

Section 16. Other information, including information on the preparation and revision of safety data sheets

Release record

Release date/Revised date : 2012-03-08

Release date before : Not identified vefore

Revision : 1

Indicates information that has changed from previously issued version.

Readers attention

The above description is based on current knowledge and experience. This Safety Data Sheet describes the product from the point of view of safety requirements. However, the information given is not a statement of the nature of the product, features, or guarantees.

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SAFETY DATA SHEET

1. Chemical Product and Company Identification

Chemical Name: Sodium Chloride

Chemical Formula: NaCl Molar Mass: 58.44 g/mol Synonym: Salt; Sea Salt CAS No.: 7647-14-5 EINECS No.: 231-598-3

Use of the Substance/Mixture: Reagent for analysis, chemical production, pharmaceutical production

and analysis.

Company: QinFen Pharmaceutical (Suzhou) Co., Ltd.

Contact Information:

Tell: 0513-81528828, 81528827, 81528826

Fax: 0513-85991023

Email: sales@qinfenpharm.com

2. Composition/Information on Ingredients

<u>Ingredients</u> <u>CAS No.</u>

Sodium Chloride 7647-14-5

3. Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

4. First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact: Not available.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Serious Inhalation: Not available.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

5. Fire and Explosion Data

Flammability of the Product: Non-flammable. Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable. Flammable Limits: Not applicable.

SAFETY DATA SHEET

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: When heated to decomposition it emits toxic fumes.

Special Remarks on Explosion Hazards: Electrolysis of sodium chloride in presence of nitrogenous compounds to produce chlorine may lead to formation of explosive nitrogen trichloride. Potentially explosive reaction with dichloromaleic anhydride + urea.

6. Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7. Handling and Storage

Precautions: Keep locked up.. Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Hygroscopic

8. Exposure Controls/Personal Protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

9. Physical and Chemical Properties

Appearance and character: White solid pellets, odorless, taste salty.

Solubility: Soluble in water and glycerine, almost insoluble in ethanol

Flash Point: Not Applicable Boiling Point (°C): 1413 (1738K)

Melting Point ($^{\circ}$):801Specific Gravity (H20=1):2.16PH4.0-7.0

10. Stability and Reactivity

Stability: The product is stable.

SAFETY DATA SHEET

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, high temperatures.

Incompatibility with various substances: Reactive with oxidizing agents, metals, acids.

Corrosivity: Not considered to be corrosive for metals and glass.

Special Remarks on Reactivity: Hygroscopic. Reacts with most nonnoble metals such as iron or steel, building materials (such as cement) Sodium chloride is rapidly attacked by bromine trifluoride. Violent

reaction with lithium.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

11. Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: WARNING: LD50: 3000 mg/kg [Rat Mouth]. LC50: 2300 mg/m³, 2 hours [Rat

Inhalation].

Chronic Effects on Humans: MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells.

Mutagenic for bacteria and/ or yeast.

Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation. **Special Remarks on other Toxic Effects on Humans:** Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: Causes eye irritation. Ingestion: Ingestion of large quantities can irritate the stomach (as in overuse of salt tablets) with nausea and vomiting. May affect behavior (muscle spasicity/contraction, somnolence), sense organs, metabolism, and cardiovascular system. Continued exposure may produce dehydration, internal organ congestion, and coma. Inhalation: Material is irritating to mucous membranes and upper respiratory tract.

12. Ecological Information

Ecotoxicity: Not available. **BOD5 and COD:** Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely

However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

13. Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport Information

Not classified as dangerous in the meaning of transport regulations.

Other Information

Regional representation: This information is given on the authorized Safety Data Sheet for your country.

The information and recommendations provided in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed as any warranty, expressed or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.

上海鑫通塑胶颜料有限公司

Xintong Plastic Shanghai Co. Ltd.

物质安全资料表 (MSDS)

Material Safety Data Sheet

一.辨识资料 Verification data

物品文名称 substance name:色母 color masterbatch

二.物理及化学特性 physics and chemistry performance

物质状态 substance state:		PH Value 值:
□ 糊状物 mash	口 粉末 powder	外观 appearance: 白色固体
	·	wnite solid
☑固体 solid	口 液体 liquid	气味 smell: 无 none
口 气体 gas		· ·
沸点 boiling point:	熔点 melting point: 115℃	蒸气压 vapor tension: None
蒸气密度 Vapor den	sity: (空气 air = 1) None	比重 specific gravity: (水
•	•	water = 1) 1.72-1.73
挥发速率 volatilization	on speed: (乙酸丁酯 =1)	水中溶解度 water-solubility:
None		Negligible

三.火灾及爆炸危害资料 fire and detonation jeopardousness data

闪火点 flash	n spark: 400°F		爆炸下	·限 low limit(L E
, 42	'	爆炸界限	jlene /	%
测试方法 te	st method:口开杯 open cup	Explosion critical limit	爆炸上	限 uplimit(U E
□闭杯 close			<u>L)</u>	<u>%</u>
火灾	灭火材料 put out a fire mater	ial:化学刊	二粉、二	二氧化碳、泡沫等适
	合于灭火的材料 $foam, CO_2$,	Powder. a	and so	on.
fire	特殊灭火程序 put out a fire s	pecial prod	cess:	在正压状态下穿著
	自携式呼吸器操作 wok with r	espirato:	<u>rs on r</u>	normal condition

四.反应特性 reaction performance

安 定 性	安定 steady		应避免之状况 should avoid status :
stability			`
	不安定		危害分解物 hurt decomposition:危害
	instability		性之气体或蒸汽 hazardous gas or
			steam
危害之聚合	可能发生		应避免之状况 should avoid the status:
	maybe occur		
Hurt of	不会发生		
polymerization	won't occur		
不相容性	应避免之	物质	should avoid the substance:强还化剂
incompatibility		或碱	reducing agent or alkali

五.健康危害及急救措施 about exuberance and first aid

进入人体之途径 path to the body : ロ 吸入 indraft	口 皮肤接触 touch with
skin	
健康危害效应 health hazardous action:	
暴露之征兆及症状 occurring omen and symptom:	
紧急处理及急救措施 urgency handling and first aid	: 吞食 swallow: 迅速就
医 see doctor immediately	CAN TO THE REAL PROPERTY.

六.暴露预防措施 uncovery and prevention

	眼部 eyes:化学安全护目镜 blinkers
个人防护装备 person	呼吸 breath:防护呼吸器 prevention breath unit
prevention equipment	
	其它 others:保护之衣物 clothes for preventing
	1. 操作于通风良好的地区, 避免眼睛及皮肤之接触
	Keeping drafty, and don't touch with your eyes or
操作与储存注意事项	skin.
operation and store notice	2.储存于阴凉、干燥、通风良好的地区,远离火源,
House	不用时密封 Store in drafty warehouse, away a fire
	and closed it when didn't use
个人卫生	避免在操作及储存区饮食和吸烟 do not eat or
person protection	smoke on the workshop and store area.

七.泄漏及废弃处理 leakage and scrapping handling

泄漏之紧急应变 meet an	清除时注意移开火源以免燃烧 Away the fire.
emergency for leakagee	
废弃处理方法 scrapping	化学焚化炉焚化或掩埋 cremation or burying
handling method	

八.制表者资料 editor information

	名称 company name: 上海鑫通塑胶颜料有限公司
	Shanghai Xintong Plastic Pigment Co., Ltd.
制表单位	地址 address:上海市嘉定区沈石路 588 号 Shanghai
preparation company	Jiading District Shenshi road No. 588
	电话 telephone : (021) 69156572



FORMOSA CHEMICALS & FIBRE CORPORATION

201, TUNG HWA N. ROAD, TEIPEI, TAIWAN R.O.C.

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: TAIRIPRO Synonyms: PP Resin

Product Use: Used according to manufacturer's directions. Compounding.

Supplier: FORMOSA CHEMICALS & FIBRE CORPORATION (PP Plant)

Address: No. 5 FORMOSA INDUSTRIAL COMPLEX, MAILIAO, YUNLIN, TAIWAN

Telephone/Fax: +886-5-6813312 / +886-5-6811030

HAZARDS IDENTIFICATION

GHS Classification:

This product is not hazardous under the criteria of U.S. Occupational Safety and Health Standard 29 CFR 1910 Subpart Z and United Nations GHS Parts 2, 3, and 4,

Potential Health Effects:

EYES: Dust and process vapors may irritate eyes.

SKIN: Exposure to molten resin may cause thermal burns.

INHALATION: Dust and process vapors may cause respiratory tractinitation

INGESTION: Not Applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Name: Polypropylene

Synonyms: PP, Polypropylene Homo-polymer/Random-copolymer/Impact-copolymer

CAS No:

Homo-polymer: 009003-07-0, Random-copolymer: 009010-79-1, Impact-copolymer: 106565-43-9 Content: > 99% (Additives ≤ 1%)

Hazard Ingredients: None

Emergency & First Aid Measures

Routes of Exposure:

Inhalation: Immediately take the person out into fresh air. If any irritation to the

respiratory tract persists, seek medical care. Skin Contact: Wash with soap and water.

Eye Contact: Wash with water. Ingestion: Not applicable.

Fire Fighting Measures

Extinguishment: Foam, dry chemicals, water, CO2.

Special Procedures: None required. Use misted water.

Personal Fire-Fighting Equipment: No special equipment is required.

Unusual Hazards: The product is combustible and dust may form an explosive mix.



FORMOSA CHEMICALS & FIBRE CORPORATION

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6. SPILL OR LEAK CONTAINMENT MEASURES

Emergency personal protection equipment: Dust mask.

Precautions to avoid environmental damage: Keep the material from entering a waterway or sewage main. It floats.

Clean-up: Sweep and recover the material for reuse or recycling.

Waste disposal: In an authorized household or industrial waste deposit.

7. Precautions for Safe Handling & Storage

GENERAL PROCEDURES: Keep away from heat, sparks and flame.

HANDLING: Ground and bond containers when transferring material.

STORAGE: This product may react with strong exidizing agents and should be a second strong exidizing agents.

STORAGE: This product may react with strong oxidizing agents and should not be stored near such materials. Store boxes and bags of material in areas protected with automatic sprinklers.

STORAGE TEMPERATURE: Store in a cool place be ow 60°C (140°F).

ELECTROSTATIC ACCUMULATION HAZARD:

Material may accumulate static charges during transfers, ground and borid containers when transferring material.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide adequate room ventilation at the extruder to minimize exposure to process vapors. Eliminate ignition sources during repair and maintenance operations.

Breathing protection: A dust mask for polypropylene in the form of dust.

Hand protection: Leather or cloth gloves.

Eye protection: Safety goggles.

Ventilation: Appropriate natural ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid	Explosive properties: Unknown
Odor: Slight waxy odor	Self-ignition temperature: 380-460°C
Concentration: 100%	Specific gravity (water = 1): 0.90
Melting Point: 140~170°C	Solubility in water: Insoluble
Boiling Point: It decomposes	Volatile (% by volume): Not applicable
Decomposition temperature: >400°C	Flame propagation speed: Unknown

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Chemical Incompatibility: The product is eaten away by chlorine and strong oxidants.

Conditions to avoid: It is degraded by heat and sunlight unless protected by

antioxidants.

Hazardous Combustive Products: Not available.





FORMOSA CHEMICALS & FIBRE CORPORATION

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Hazardous Polymerization: Impossible.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: None suggested.

Chronic or long-term toxicity: Not available.

Local Effects: Local irritation by abrasion.

Allergic reaction: Not available.

12. ECOLOGICAL INFORMATION

Instability: Not applicable.

Persistence/Degradability: Like plastic in the long term.

Environmental Precautions: It must be disposed of by incineration or in an authorized

waste deposit.

13. Disposal Considerations

Elimination of the product in waste: reuse, recycling, reineration or authorized dump.

14. Transport Information

SPECIAL SHIPPING NOTES:

This product is not regulated by DOT, IMO, IATA, Canadian DG and associated regulations, ADR or RID.

15. Regulatory Information

This product must be carried according to environmental laws governing the transport of non-hazardous substances.

16. OTHER INFORMATION

The data contained in this informational sheet were obtained from reliable sources. The information furnished is the information currently available on the product. The use of this information and of the products is beyond the supplier's control. The user is responsible for determining the conditions for safe use of the product.

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